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**A critical examination of the Department of Defense
Priority Management Effort, Project PRIME.**

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A CRITICAL EXAMINATION OF
THE DEPARTMENT OF DEFENSE
PRIORITY MANAGEMENT EFFORT,
PROJECT PRIME

by

Franklin Derry Crutchfield

A CRITICAL EXAMINATION OF THE DEPARTMENT OF DEFENSE
PRIORITY MANAGEMENT EFFORT, PROJECT PRIME

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A Thesis Submitted to the School of Government and
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University in Partial Fulfillment of the
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CHAPTER I

INTRODUCTION

In a memorandum to Secretary of Defense Robert S. McNamara dated October 15, 1965, Dr. Robert N. Anthony, Assistant Secretary of Defense (Comptroller), outlined the concepts upon which a new management control system within the Department of Defense (DOD) would be built.¹ Preceding that memorandum is a long history of continuous change to defense and other Federal Government budgeting and accounting procedures. Out of that memorandum has grown an interlocking series of sweeping changes which transcend budgeting and accounting procedures and go to the foundations of military line operating management itself.

Those changes are collectively entitled the "Resource Management Systems" (RMS). That portion of RMS which is concerned with changes to programming, budgeting, and accounting systems and specifically to management of resources for operations is entitled the "Priority Management Effort" (PRIME) and is the subject of this study. RMS is the broader, more inclusive of the two terms. For the purpose of this study,

¹Memorandum from Hon. Robert N. Anthony, Assistant Secretary of Defense (Comptroller), to Hon. Robert S. McNamara, Secretary of Defense, Washington, D. C., October 15, 1965.

any reference to RMS is equally applicable to PRIME. The converse is true and the two terms are to be considered interchangeable.

An impressive volume of information concerning PRIME has been disseminated by the Office of the Secretary of Defense (OSD), a term which this study uses to include all subordinate offices within the Secretary of Defense organization, to the military departments, the Federal Government as a whole, and the general public. The tenor of that information is that existing military resource management techniques are generally inadequate and unsatisfactory and that a totally new management control system is therefore required to replace the existing systems. As presented, the objectives and promised achievements of PRIME are alleged not only to eliminate the inadequacies of the systems being replaced but also to offer significant overall improvements to the management of military resources.

There are, however, strong undercurrents of dissatisfaction with PRIME in the military departments which can be sensed, if not verified directly. There are numerous disagreements with certain specific provisions of PRIME which can be verified in official correspondence. The Congress refused to appropriate the funds required to implement PRIME in fiscal year 1969 which were requested by OSD, calling

PRIME "too much too soon."² The Congress further explicitly prohibited implementation of all or any part of PRIME in fiscal year 1968, with or without funds, and placed stringent constraints on any future implementation of PRIME.

Psychological research indicates that it is natural for an individual, and organizations, to initially resist change, as such, regardless of the merits or demerits of the change. The resistance to PRIME as evidenced by the persistent dissatisfaction in the military departments and the particularly strong reaction of the Congress suggests that something more than natural reluctance to give up the old way of doing things is involved. It is the purpose of this study to examine PRIME to determine if PRIME is indeed designed so as to be capable of delivering the improvements promised by its proponents and the reason or reasons why PRIME has aroused such strong resistance.

The basic question that this study seeks to answer is: Can PRIME achieve the improvements to military resource management which are claimed by its planners? Subsidiary questions are: Was PRIME planned on a purely theoretical level or did its planners give adequate consideration to practical matters as well? Are the resource management systems proposed by PRIME compatible with existing operating management systems? Is the management philosophy contemplated by PRIME consistent

²U.S., Congress, House of Representatives, Committee on Appropriations, Department of Defense Appropriation Bill, 1968, 90th Cong., 1st Sess., H. Rept. 349 to accompany H.R. 10738, p. 6.

with existing military management philosophies? Are the changes to the military decision-making processes proposed by PRIME necessary and functional? Will the benefits which accrue from PRIME justify its cost?

This study will be limited to a viewpoint from within the Department of the Navy, excluding the U. S. Marine Corps. The reader must understand that the opinions expressed and conclusions drawn in this study are those of the writer in his role as a student and must not be considered as necessarily representative of or supported by any military or civilian member of the Department of Defense.

Information used for this study consists primarily of a great number of staff studies, reports, directives, memoranda, and other documents which originate in OSD and the Department of the Navy. The writer has experienced some difficulty in gathering relevant, current information pertaining to PRIME. This difficulty was not caused by lack of assistance from within the DOD, which instead was freely given, but rather was for the following three reasons:

1. Guidelines for the implementation of PRIME have not been systematically promulgated by OSD but instead consist of directives of a variety of forms, which include official, formal directives ("instructions"), formal memoranda, draft instructions and memoranda, and implied guidance contained in speeches, articles in periodicals, and "unofficial" information pamphlets and handbooks.

2. Despite information which might lead one to believe that PRIME is a complete set of systems and procedures which are ready to be implemented at the will of the Congress, several elements of PRIME exist largely in concept only at this time.

3. PRIME has undergone considerable change since it was conceived and is expected to be changed even more, especially because of the Congressional prohibition of its implementation.

Additional sources of information upon which this study relies are published materials relating to management, management control systems theory, and management within the Federal Government and DOD. Public Congressional documents provide insight into the reaction of the Congress to PRIME. A final source from which the writer will draw information is his nine-and-one-half-year experience in naval aviation material and financial support functions.

To evaluate PRIME in terms of the question raised above, this study will examine the concepts, objectives, assumptions, and guidelines for implementation of PRIME as promulgated by OSD in the practical situations in which PRIME seeks to function. In addition to the management environment internal to DOD, the very important relationship between PRIME and the Congress will be discussed. The writer believes that this study is needed to provide a critical, if not more objective, evaluation of PRIME than is now available elsewhere.

To lay the foundation for PRIME so that it may be viewed in the proper perspective, Chapter II will discuss the origins and current status of PRIME. Chapter III will explain the objectives and concepts of PRIME to point out their significance and the assumptions upon which they are based. Chapters IV and V will describe the actual working guidelines promulgated for the implementation of PRIME and the achievements and problems encountered. The final chapter, Chapter VI, will conclude this study with a brief evaluation of PRIME in terms of the questions raised by the writer and a general prognosis of the future of PRIME.

CHAPTER II

THE ORIGINS AND DEVELOPMENT OF PRIME

To place PRIME in focus, it is necessary to trace the events and forces which precede it and shape its form and substance. PRIME is the union and extension of several parallel chains of evolution in the budgeting, accounting, and management processes of the Federal Government and the Defense establishment. The principal precedents of PRIME are budgeting reform and the movement toward program-based budgeting, the growth of civilian control of the Defense establishment, and the efforts to improve governmental accounting practices.

Program Budgeting

As a result of pressures which had their origins in the movements toward reform of municipal governments, President Taft requested in 1909 and the Congress authorized in 1910 a "Commission on Economy and Efficiency" to study the workings of the Federal Government. The report of the Commission, presented to the Congress in 1912, recommended a comprehensive federal budget classified by program, or function, that would distinguish between expenditures for

capital and for current items.¹ The Budget and Accounting Act of 1921 established the recommended comprehensive federal budget, but the budget form itself was largely unchanged and focused upon object, or end-use of expenditure, not program or function.

Program-based budgeting in the Federal Government as proposed by the Commission remained dormant except for limited application in a few non-defense agencies. The (Hoover) Commission on Organization of the Executive Branch of the Government reopened interest in program-based budgets and recommended that the budget be " . . . based upon function, activities, and projects . . . ," the so-called "performance" budget.² Although subsequently required for the Department of Defense by the 1949 amendments to the National Security Act of 1947, and encouraged for all of the Federal Government by the Budget and Accounting Procedures Act of 1950 (P.L. 784, 81st Cong., 2nd Sess.), program budgeting remained largely a concept only. The DOD budget developed from the laws cited was still basically oriented toward object of expenditure, as evidenced by the supporting appropriation structure, which is as follows:

¹Arthur Smithies, "Conceptual Framework," Program Budgeting, Program Analysis and the Federal Budget, ed. David Novick (Cambridge, Massachusetts: Harvard University Press, 1965), p. 30.

²Commission on Organization of the Executive Branch of the Government, The Hoover Commission Report (New York: McGraw-Hill Book Company, Inc., 1949), p. 36.

Operations and Maintenance
 Military Personnel
 Procurement
 Research, Development, Test, and Evaluation
 Military Construction

Only the fourth category, Research, Development, Test, and Evaluation, indicates the program or function served by the appropriation. Since the budget is structured upon organizations, and the other categories of appropriations do not, in themselves, denote programs, the DOD budget indicated only the "what for," not the "why" of DOD spending. As stated by Robert Grosse and Arnold Proschan:

The establishment of appropriations of this kind was generally regarded as fulfilling the recommendations of the first Hoover Commission. . . . It would later be questioned whether these appropriations adequately revealed the purposes of Defense activity. The growing need for a more informative classification would be a principal motivation of the programming system. (Emphasis mine.)³

After the hearings on the fiscal year 1960 DOD appropriations, the Chairman of the House Committee on Appropriations, Mr. George H. Mahon, called for analysis of the 1961 DOD budget on a functional, or program basis.⁴ Out of that request and the subsequent successful application of program budgeting in the DOD has grown the Planning-Programming-Budgeting (PPB) system of the Federal Government. PPB requires that "the program categories used in each agency

³Robert N. Grosse and Arnold Proschan, "The Annual Cycle: Planning-Programming-Budgeting," Defense Management, ed. Stephen Enke (Englewood Cliffs, New Jersey: Prentice-Hall, Inc., 1967), pp. 26-27.

⁴Ibid., p. 30.

should provide a suitable framework for considering and resolving the major questions of mission and scale of operations"⁵ with respect to "long-range goals and objectives and anticipated program accomplishments."⁶ Budgetary review in the Executive Branch of the Federal Government will henceforth be in program terms. PPB will extend to all Executive Branch agencies and departments, with only minor exceptions, on January 1, 1968.

Civilian Control of the Defense Establishment

The second major precedent of PRIME originated with the National Security Act of 1947 which created the National Military Establishment under the nominal leadership of the Secretary of Defense. In addition to calling for program-based budgets, as previously discussed, the 1949 amendments to the Act created the Department of Defense and strengthened the authority of the Office of the Secretary of Defense, added the position of Assistant Secretary of Defense (Comptroller) and a comptroller to each of the military departments, and downgraded the military departments from executive status. The Defense Reorganization Act of 1958 (P.L. 599, 85th Cong., 2d Sess.) further added to the authority of the Secretary of Defense. Budgeting remained,

⁵U.S., Executive Office of the President, Bureau of the Budget, Bulletin No. 68-2, "Planning-Programming-Budgeting," Washington, D. C., July 18, 1967, p. 2.

⁶Ibid., p. 3.

however, largely a process carried out directly between the military departments and the Congress. As described by William A. Niskanen, "During the late 1950's there was a growing recognition that the civilian administration of the Department of Defense had been losing control of the central political element of the defense program--the allocation of resources among missions."⁷

At this crucial point in time, Congressman Mahon's call for analysis of the budget in program terms coincided with the appointment of Mr. Robert S. McNamara to the position of Secretary of Defense and Mr. Charles J. Hitch, an advocate of program budgeting, to Assistant Secretary of Defense (Comptroller). Those appointments led to quick installation of program budgeting within the DOD under the firm control of the Secretary of Defense and signalled the beginning of a new era of strong civilian control over the military departments and of a new willingness to change the traditional military management practices.

Accounting Improvement

The effectiveness of a budget as a planning and control device depends to a large part upon the adequacy of the financial information upon which the budget is based. In recognition of the inability of existing Federal Government accounting systems to uniformly and consistently generate

⁷William A. Niskanen, "The Defense Resource Allocation Process," Defense Management, ed. Stephen Enke (Englewood Cliffs, New Jersey: Prentice-Hall, Inc., 1967), p. 7.

reliable and useable information, the Comptroller General of the United States began formal cooperation in 1947 with the Director of the Bureau of the Budget and the Secretary of the Treasury to work toward governmental accounting reform. The objectives of this program, known initially as the "Joint Program for Improving Accounting in the Federal Government," were declared to be the policy of the Congress and the program was restyled to be the "Joint Financial Management Improvement Program" by the Budget and Accounting Procedures Act of 1950. That Act calls for, among other things, accrual accounting. Public Law 84-863 (31. U.S.C. 24), passed in 1956 following the recommendations of the Second Hoover Commission, reiterates the requirement for accrual accounting and adds the requirement for cost-based budgeting for both the internal executive branch operations and the appropriation requests submitted to the Congress.

As of 1965, many years after the passage of the legislation discussed above, accounting systems in the DOD remained essentially unchanged. Accounting procedures within the military departments emphasized the accounting for obligations and expenditures within the appropriation structure enacted by the Congress and budgeting emphasized obligations to be incurred during the budget period, not necessarily actual resources consumed. The accrual concept of accounting was applied only to certain commercial-type Defense activities and to civilian personnel payrolls. Furthermore, accounting systems were structured on the existing military organizations

which were not consistent with the program structure used for PPB. Consequently, a complicated and sometimes arbitrary proration process was required to convert financial information generated by organizational accounting to information required for the DOD program structure. In addition, the distinction between capital and current items in the military appropriations was not clear. Thus, military accounting systems were not in accord with the wishes of the Congress expressed in law. The Congress, however, had not exerted pressure on the military departments, nor on any Executive Branch department or agency to comply with the laws. The Honorable Frank H. Weitzel, Assistant Comptroller General of the United States, stated that the reason for the failure to comply with the laws was a combination of the fact that " . . . the Executive Branch was not fully sold on cost-based budgets and the accrual basis of accounting . . . ," and the fact that the Executive Branch was " . . . still able to get appropriations . . . ," without compliance.⁸

The Emergence of PRIME

The appointment of Dr. Robert N. Anthony to the position of Assistant Secretary of Defense (Comptroller) in 1965 marked the final intersection of the various trains of events discussed above. At the request of Secretary McNamara,

⁸Frank H. Weitzel, Assistant Comptroller General of the United States, in an Address to the Students of the Navy Graduate Financial Management Program, The George Washington University, Washington, D. C., November 13, 1967.

Dr. Anthony set out to pull together all the various pieces of management, accounting, and budgeting systems into one integrated management control system for the whole of the DOD. Within the framework of the laws previously cited, and using to its fullest the authority held by the civilian managers of the DOD, Dr. Anthony developed RMS and PRIME not only to satisfy the laws and enhance the effectiveness of PPB but also to establish a completely new management environment and philosophy in the DOD. PRIME was given added impetus by President Lyndon B. Johnson, who stated in a memorandum dated May 24, 1966, that "I have a strong and continuing interest in the development of business-like financial systems With a positive action program on your part, we can readily achieve what is contemplated in the Budget and Accounting Procedures Act--the utilization of the best business practices in the day-to-day management of our Government."⁹

OSD developed RMS/PRIME over a period of almost one and one-half years. Within the Navy a full scale test, or "demonstration" of PRIME was conducted in fiscal year 1967 at the U. S. Naval Air Station, Quonset Point, Rhode Island. The test commenced shortly after the beginning of the fiscal year. In December, 1966, after the test had been underway for nearly six months, the following evaluation of the test and of RMS was rendered:

⁹Lyndon B. Johnson, The President of the United States of America, Memorandum to Heads of Departments and Agencies, Washington, D. C., May 24, 1966.

It is the considered opinion of this command that the effort being expended on the NAS Quonset Point test is effort well applied, however, the prototype system, while in most respects workable and successful, is not yet perfected. It is therefore much too early to come to any conclusions on the system. Many areas where considerable additional effort must be applied have been highlighted and decisions must be made to resolve difficulties for installing base level RMS on a Navy-wide basis. It is considered that the system should be subjected to the cyclic events of a full year before attempts are made to install it at other stations. Even then like stations should be selected and the system installed in manageable increments. It is not clear how this can be accomplished at all stations by 1 July 1967.¹⁰ (Emphasis mine.)

Despite the difficulties remaining to be resolved and the recommendation for selective and orderly implementation of PRIME in the above quotation, OSD planned to implement PRIME completely within DOD on July 1, 1967. As stated by OSD in April, 1967, "The one certainty regarding Project PRIME is that it represents a decision which has been made."¹¹ The Congress, however, thought otherwise.

Congressional Reaction to PRIME

The fiscal year 1968 DOD budget estimates submitted to the First Session of the Ninetieth Congress included \$52,700,000 to install PRIME and operate it for one year, much of that amount being for the pay of additional civilian

¹⁰U.S., Department of the Navy, Headquarters Naval Material Command, Letter of the Chief of Naval Material to the Comptroller of the Navy, Subject: Resource Management at Station (Base) Level; evaluation of, Washington, D. C., December 1, 1966, p. 3.

¹¹U.S., Department of Defense, Office of the Assistant Secretary of Defense (Comptroller), A Primer on Project PRIME, Washington, D. C., April, 1967, p. 78.

personnel needed to administer the new systems. The House Committee on Appropriations rejected that request in the following manner:

The Committee has deleted funds budgeted in the Operation and Maintenance accounts for the so-called Resources Management System of the Department of Defense. The principal element of this system is known as Project PRIME, a proposal to completely alter the character of Defense budgeting and accounting so as to bring it in consonance with the program system of the Department.

The Committee is of the opinion that this proposal appears to be a case of too much too soon. While it is undoubtedly true that significant changes in the budgeting and accounting system of the Department of Defense should perhaps be accomplished, and this is to some extent true of all agencies of the Federal Government, what is understood of the proposal under Project PRIME would indicate a massive change which to some extent would temporarily diminish Congressional control and which appears to be proposed for at least partial initiation without due regard for Congressional expression.

The Committee directs that there be no such change in the budgeting and accounting system of the Department of Defense preparatory to the formulation of the fiscal year 1969 budget presentation.¹²

The Senate Committee on Appropriations concurred in the House action and further rejected an OSD appeal to restore \$3,500,000 of the amount cut by the House which OSD intended to use to finance additional tests of PRIME during fiscal year 1968. The Senate Committee did state:

The committee has no objection to a further test of the proposed system as provided for by the House committee. However, it is the view of the committee that

¹²H. Rept. 349.

such tests should be funded from available resources and the Department's requests for funds to finance these tests have been disallowed.¹³

At this point Secretary McNamara acceded partially to the wishes of the Congress, but only partially. In a letter of August 7, 1967, to the Chairman of the House Committee on Appropriations, Secretary McNamara declared that the

. . . FY 1969 President's Budget will be prepared and submitted in the same format as was used in FY 1968. . . . our appropriation accounting will produce reports that conform to the appropriation and budget activity structure set forth in the FY 1969 budget as submitted to the Congress.¹⁴

Secretary McNamara further stated, however, that

Internally, we shall use a management control system that focuses on expenses classified according to the organization units responsible for incurring them. We shall of course be glad to furnish the Subcommittee such information from this system as it desires, recognizing that this information would be in addition to, and not a substitute for, the appropriation accounting information mentioned above. . . . we shall plan on submitting the FY 1970 budget for operations in a form that summarizes proposed operating expenses by major organizational entities and programs.¹⁵

Secretary McNamara's stated intention to proceed with the internal implementation of RMS/PRIME quoted above provoked the following statement on the floor of the Senate by Senator John Stennis of the Senate Committee on Appropriations:

¹³U.S., Congress, Senate, Committee on Appropriations, Department of Defense Appropriation Bill, 1968, 90th Cong., 1st Sess., 1967, S. Rept. 494 to accompany H.R. 10738, p. 22.

¹⁴Robert S. McNamara, Secretary of Defense, Letter to Hon. George H. Mahon, Chairman, House Committee on Appropriations, Washington, D. C., August 7, 1967.

¹⁵Ibid.

" . . . when funds for a specific purpose are disallowed, and the report of the committee clearly states the intent of such action, the Department of Defense should follow accordingly. It is clear in this instance the Department of Defense is not following the full intent"16 And further:

" . . . the Department of Defense has seen fit to ignore the actions of the House Appropriations Committee, the House of Representatives, and the Senate Appropriations Committee in disallowing these funds and intends to proceed with at least partial implementation"17

On August 18, 1967, the DOD Appropriations Bill, 1968, reached the floor of the Senate. Senator Stennis offered an amendment to the Bill which, with minor modifications, was adopted by the Senate on August 21, 1967, as follows:

During the current fiscal year none of the funds available to the Department of Defense may be used to install or utilize any new "cost-based" or "expense-based" system or systems for accounting, including accounting results for the purposes prescribed by section 113 (a) (4) of the Budget and Accounting Procedures Act of 1950 (31 U.S.C. 66a (a) (4)), until 15 days after the Comptroller General of the United States (after consultation with the Director of the Bureau of the Budget) has reported to the Congress that in his opinion such system or systems are designed to: (1) meet the requirements of all applicable laws governing budgeting, accounting, and the administration of public funds and the standards and procedures established pursuant thereto; (2) provide for uniform application to the extent practicable throughout the Department of Defense; and (3) prevent violations of the antideficiency statute (R.S. 3679; 31 U.S.C. 665).18

¹⁶U.S., Congressional Record, 90th Cong., 1st Sess., 1967, CXIII, No. 132, p. S11844.

¹⁷Ibid., No. 133, p. S11924.

¹⁸Ibid., p. S11923.

On August 23, 1967, the Conference Committee on the Bill accepted the Senate amendment but lengthened the waiting period between General Accounting Office (GAO) approval and implementation to 45 days, as opposed to the 15 days originally proposed.¹⁹ It is significant to note that this amendment is legislation attached to an appropriation bill, which is contrary to the general rules of both houses of the Congress. The strong feelings of the Congress against RMS/PRIME evidenced by Senator Stennis's statements brought about suspension of the general rules and PRIME was quite forcefully and effectively halted.

Current Status of PRIME

Many of the minor or procedural changes of PRIME have already been implemented. The large conceptual changes, however, are still under the Congressional prohibition. Additional, larger tests of PRIME are currently in progress at major installations and commands of the military departments and the U. S. Marine Corps, as permitted by the Congress. To increase the probability of reducing or eliminating objections to PRIME, representatives of the GAO are active, on-site participants in the tests. GAO appears to be basically satisfied that PRIME can qualify for acceptance under the provisions of the amendment quoted previously.

¹⁹U.S., House, Conference Committee on the 1968 Department of Defense Appropriations Bill, Appropriations for the Department of Defense for 1968, 90th Cong., 1st Sess., H. Rept No. 595 to accompany H.R. 10738, p. 8.

Current plans call for GAO to review PRIME completely about February 1, 1968. GAO findings and recommendations will be submitted to the Congress about March 1, 1968. Barring any unexpected difficulties, Congressional approval should follow shortly thereafter and PRIME would be implemented fully on July 1, 1968. The Navy has prepared all the necessary working procedures manuals and instructions, has conducted extensive orientation and training of the personnel who will be involved with PRIME, and stands ready to operate under PRIME when directed.

PRIME is not static and is undergoing continuous minor revision as the results of the tests point out areas which require modification. Some of the problems presented in this study are even now under review and are expected to be altered before July 1, 1968. The reader must therefore understand that PRIME is not inflexible but can be changed when necessary. While frustrating to PRIME's planners, the delay imposed by the Congress may work to the advantage of PRIME by providing an additional year in which PRIME is being refined. Equally important, the extra year has allowed additional training and exposure to PRIME at the operating level, and it is the operating level that will ultimately determine the success or failure of PRIME.

CHAPTER III

THE THEORETICAL FOUNDATIONS OF PRIME

PRIME is a conglomeration of changes, large and small, procedural and conceptual, which are intended to provide an integrated system of broad management control to military managers. Not content to merely satisfy the letter of the Budget and Accounting Procedures Act of 1950 and associated legislation, PRIME seeks to alter basic military management philosophy by replacing existing military management control systems in part or completely with systems based on almost totally different techniques and theories. The ultimate objective of PRIME is to create a wholly new management environment based on concepts developed for commercial enterprises. This chapter will present the objectives of PRIME as promulgated by its planners and discuss and analyze the theoretical framework upon which PRIME is built. Existing military management concepts will be briefly contrasted so as to place PRIME in the proper perspective.

Objectives

The basic, official DOD directive which establishes RMS defines "resources" as man, material, services, and money, and "resource management systems" as those systems which

collect and process recurring quantitative (monetary or nonmonetary) information for management use.¹ That directive states that the objectives of RMS are:

To provide managers at all levels within the Department of Defense with information that will help them assure that resources are obtained and used effectively and efficiently in the accomplishment of Department of Defense objectives.

To provide information that is useful in the formulation of objectives and plans.

To provide data to support program proposals and requests for funds.

To provide a means of assuring that statutes, agreements with Congressional committees, and other requirements emanating from outside the Department of Defense relating to resources, are complied with.²

The objectives quoted above are broad and general and provide little concrete working guidance. More detailed and specific direction relating to the areas that are covered by PRIME is provided as follows:

Programming and budgeting systems will:

1. Be correlated as fully as possible with each other and with management accounting systems, using common data elements and definitions, translatable structures and non-duplicative procedures and schedules.

2. Be organized so as to focus on the goals, purposes, and outputs of the Department of Defense, and on the costs of achieving these goals.

Systems for management of resources of operating activities will:

¹U.S., Department of Defense, Instruction 7000.1, "Resource Management Systems of the Department of Defense," August 22, 1966, p. 1.

²Ibid., p. 3.

1. Focus on outputs and on resources used, i.e., expenses.
2. Focus on managers who are responsible for effective and efficient utilization of resources.
3. Focus on actual performance in relation to planned performance.
4. Use expense operating budgets and accounting as a primary aid in management control at each organizational level.
5. Use working capital to hold resources in suspense in both time and place between the acquisition of resources and their consumption.³

Two additional items of policy pertaining to RMS contained in the basic directive are worthy of note: "Each system or subsystem will be compatible with other systems; . . . the value of information obtained must exceed the cost of collecting it;"⁴

Principal authority within OSD for the design and installation of RMS is assigned to the Assistant Secretary of Defense (Comptroller), ASD (C). ASD (C)'s charter to direct and control DOD efforts toward planning and implementation of RMS is broad and inclusive. The only information systems excluded from RMS by the basic directive are systems which cannot be related directly or indirectly to resources, such as systems for the collection and processing of military intelligence, tactical doctrine, and the like.

The primary responsibility of ASD (C) in RMS is
 " . . . to provide for the development of systems that will

³Ibid., pp. 3-4.

⁴Ibid., p. 5.

help managers do their jobs."⁵ (Emphasis mine.) In this connection, ASD (C) states that the central objectives of RMS and PRIME are:

" . . . to aid operating managers at all levels by providing them with:

1. Clearly defined goals.
2. Some added discretion in determining the mix of resources used to achieve these goals.
3. A meaningful way to measure how well goals are met, and how efficiently resources are being used to meet the goals.
4. Even stronger motivation than at present to manage well.⁶

The theme that runs through the objectives which are quoted in the preceding paragraphs and through all other literature pertaining to PRIME is that the overall goal of PRIME is to give military managers an all-purpose tool to improve their ability to manage resources effectively and efficiently, which will ultimately result in increased decentralization of Defense decision-making. The two halves of that tool are the measurement of inputs, resources consumed, and the measurement of outputs, performance. With those two mutually dependent and vital elements, PRIME seeks to bring a higher degree of rationality to military decision-making than now exists, by giving greater visibility into the consequences of alternative choices for the use of resources. The keys to the decision-making process sought by PRIME are managerial

⁵Ibid., p. 6.

⁶A Primer on Project PRIME, p. 12.

motivation, which presumably will drive the decision maker to make the optimum choice indicated by the system, and more freedom to actually make the choice.

Concepts and Assumptions

The changes to be introduced by PRIME are based on certain concepts, which are in turn supported by or dependent upon certain assumptions. Those concepts and assumptions, as viewed by this writer, are presented in the following paragraphs.

"Full Costing."--The single most important concept upon which PRIME is built is the accountant's concept of "full costing." Full costing under PRIME would charge military organizational units that are identifiable in the accounting system at the lowest level with virtually all costs associated with their operations, and even their existence. The intent of PRIME is not only to provide more complete cost information for programming and budgeting purposes but is also to use full costing as a means of arousing motivation to manage resources efficiently at the operating level. Dr. Anthony explained the concept as follows:

The focus is on expenses, that is on the resources consumed by an organization unit in carrying out their part of the program. . . . By expenses, I mean personnel costs, military as well as civilians; I mean the supplies used by the organization, including spare parts and other consumable material now carried in procurement accounts; and I mean the services received by the organization, including maintenance, repair, and services received from other units within DOD. By the word measurable, I mean to exclude allocated and prorated costs.

.....
 The costs of military personnel must be charged to the units where the personnel work.

.....
 Our long range goal is to charge 100 per cent of measurable expense.⁷

Concerning the operating manager under the full costing concept, Dr. Anthony further explained:

In brief, the objective of the system is to not only permit, but to encourage, to motivate, managers to manage the use of their resources--their total resources, not just a piece of them.

.....
 . . . the manager's flexibility in deciding on what resources to use should be increased.

.....
 [The system] should, moreover, motivate managers to be more concerned about the use of resources, and therefore lessen the need for exhortation, inspection, specified constraints, and other devices that are now used as a substitute for built-in motivation.⁸

PRIME's concept of full costing is in opposition to the concepts of "direct costing," by which the costs of military units are presently financed and accounted for at the operating level for management control purposes, and full costing, by which all relevant costs are assigned to military units for planning, programming, and budgeting purposes at higher levels. Under existing procedures, military units are

⁷Robert N. Anthony, Address, "The What and Why of Project PRIME," to the Defense Management Systems Course, Naval Postgraduate School, Monterey, Calif., August 5, 1966.

⁸Ibid.

charged only for the direct costs which are incurred in operations and which can be controlled to some extent by the unit commander. Costs which the unit commander can control usually vary directly with the level of operations but may include relatively long-term, fixed costs. Controllable costs charged to the unit under the direct costing concept are equally valid costs for planning, programming, and budgeting. Other costs, such as those applicable to military personnel, are managed, funded, and accounted for at higher levels. Those resources are provided to the using level without charge and the accounting system does not reflect a cost charge directly to the user at that level. Costs of this nature which can be directly identified to a unit are assigned, however, to the unit for planning, programming, and budgeting purposes at higher levels. Other costs which cannot be directly identified to any given military unit, such as the costs of central overhaul and repair of major equipment items, are statistically allocated to the unit level for planning, programming, and budgeting, also at the higher levels. In summary, therefore, the present system charges only controllable costs directly to the unit level for management control purposes but recognizes and accounts for full costs at higher levels for planning, programming, and budgeting.

The factor which determines to whom the charge will be placed in the existing systems for purposes of management control is the control, not the use or consumption of

resources. Those commanders who control resources are generally responsible for the effective and efficient allocation of resources toward results. Recipients of "free" resources are placed under nonmonetary constraints, such as limitations on the number of military personnel assigned to the recipient unit, by the controlling commander. Under PRIME, units would be charged for all resources received, priced at transfer prices--actual costs, where available, or standard costs.

Concerning the difference between controllable and non-controllable costs at the user level, Dr. Anthony declared: " . . . it is an easy matter to structure reports so that the controllable expenses are separated from the others."⁹ The expectation evidenced by Dr. Anthony's explanation of the full costing concept is that knowledge of costs, regardless of control, will motivate unit commanders --managers--to be more efficient in the use of resources and to seek alternate ways of achieving their assigned tasks. This expectation assumes that knowledge of costs alone, regardless of control, will provide the stimulus to work toward efficiency and that no motivation to be efficient now exists. The latter part of that assumption was previously asserted by Dr. Anthony in the memorandum referred to in the Introduction as follows: "At present, managers are adequately motivated to get their job done well (that is, to be effective)

⁹Ibid.

but they are inadequately motivated to get the job done at an optimum cost (that is, to be efficient)."¹⁰

Integration of Programming, Budgeting, and Accounting.

--Before PRIME, DOD programming, budgeting, and accounting systems were each structured differently. The DOD programming system analyzed defense activities by functions and total costs with only secondary reference to the details of organizations and costs. The DOD budget was divided organizationally by military department and cast in terms of the appropriation structure and budget activities (major divisions of appropriations) by which the Congress enacts funds for the DOD. The DOD budget was connected to the programming system only by supporting analyses. The accounting systems internal to the military departments accounted for appropriations along organizational lines without any direct reference to the programming system. Estimated period costs of operations necessary to develop and support budgets and program analyses were obtained from separate but parallel cost accounting systems for costs funded at the operating level, and from statistical methods or application of standard costs for costs funded at higher levels, such as military personnel costs.

Neither the present appropriation nor military organizational structures are directly relatable to the DOD program structure. Conversion of information to or from the program structure, therefore, required allocation and

¹⁰Anthony to McNamara.

proration of some costs, which lessened the absolute accuracy and reliability of such information. Complicating the situation even further, before PRIME there was no uniform, explicit criteria for the identification of military units to DOD programs. In addition, each military department had its own definitions by which costs were differentiated between investment (capital) costs and current operating costs and its own procedures to classify costs by function and end use. While the differences among the military departments were sometimes small, they did lessen the usefulness of comparison of costs within the program structure and make the choice between competing programs and military department more difficult to make.

Procedurally, PRIME solves much of the above problem by establishing a series of uniform program and cost definitions and criteria and revising the program structure itself. PRIME will totally change the situation described above, however, by restructuring the budgeting and accounting systems to conform to the DOD programming structure. The budget as prepared by the military departments and consolidated by the OSD for presentation to the Congress will be arrayed entirely by DOD programs and even the appropriation structure by the Congress would be changed. The assumptions implicit in this concept are that the information obtained from the present budget and accounting systems is too inaccurate or unreliable to use and that nothing short of total system change can be done to improve the quality of that information.

To provide either program-oriented or organizationally-oriented cost information to support the revised budget, Dr. Anthony introduced to the DOD the "responsibility center" concept. Dr. Anthony defines a responsibility center as " . . . an organizational unit. . . headed by a supervisor who is responsible for the activities of the unit."¹¹ The responsibility centers and subsidiary accounting entities in the military departments are to be so structured as to be able to provide cost information for either, or both organizational and program uses, the so-called "cost building block"¹² concept. While both of these changes are largely procedural, they have forced the Navy to reexamine and alter its organizations for funding and accounting.

Flexibility - Decentralized Decision Making.--Although virtually no reference is made to this concept in official directives, much reference to increased managerial flexibility is made in the unofficial literature relating to PRIME. As pointed out by Dr. Anthony in the speech quoted previously in this chapter, PRIME seeks to decentralize the military decision-making process by increasing the flexibility of operating managers in choosing what resources to use. This concept is necessarily based on the assumption that operating

¹¹Robert N. Anthony, Management Control Systems, Cases and Readings (Homewood, Illinois: Richard D. Irwin, Inc., 1965), p. 165.

¹²Robert N. Anthony, Management Accounting, Text and Cases (Homewood, Illinois: Richard D. Irwin, Inc., 1964), p. 443.

managers are capable of making decisions of better quality than are presently being made at higher levels. It further assumes that decisions made at lower levels will be in the best interest of the organization as a whole in each case. Finally, the idea of decentralization of decision-making must always assume that the management control system will give the decision maker the appropriate signal for the correct decision.

An example of this type of decision-making cited often by PRIME's proponents is that of the "motor pool" decision. PRIME envisions the user of vehicles from a motor pool reviewing his requirements and the costs involved and correctly determining whether to use motor pool vehicles, vehicles procured from outside civilian sources, or no vehicles at all, based on the immediate cost considerations only.

Measurement of Output.--Both the official and the unofficial literature of PRIME are replete with references to the objective of PRIME to measure the output of military units. Many of those references have already been presented in this study and there is no need for further amplification. The concept which PRIME asserts is that military units have an "output" and that that output is the index of performance against which costs should be evaluated. The assumptions inherent in this concept are as follows:

1. That military units have an output for a period or point in time which can be measured by an objective, generally quantifiable index which is meaningful to managers at all levels and which truly describes the real performance of

the military unit.

2. That the output of a military unit relates to the costs of resources consumed by the unit.

3. That the relationship between the costs and the output of a military unit can be reduced to a means by which changes in outputs can be predicted from changes in inputs.

Planning for and implementation of the measurement of inputs, resources consumed or used, has proceeded apace for over two years. The measurement of outputs, however, is still in the early developmental stage and on a conceptual level only at this time. A subsequent chapter of this study will discuss the planning theories for output measurement as they currently exist.

Accrual Accounting.--Appropriations enacted by the Congress are expressed in terms of authority to obligate the Federal Government to pay sums of money for goods or services ordered from commercial or other governmental sources during the fiscal year. The Congress has enacted punitive legislation, the Anti-Deficiency Act, R.S. 3679, to insure that the recipients of appropriations obligate only the amounts appropriated and only for the purposes specified in the appropriation act. To that end, most of the DOD accounting systems are oriented toward accounting for obligations. Since obligations at one point in time are promises to pay and do not necessarily relate to the actual point in time of the receipt and consumption or use of goods or services, an accounting system

for obligations may not express the actual cost of goods and services consumed or used during any specific period of time. PRIME proposes to change the DOD obligation accounting systems to an actual, accrued expense basis and confine obligation accounting to the military department level. A supporting accounting device to facilitate accrual accounting is the "stock fund" account which will hold goods in suspense accounts until the actual time of use or consumption. Stock fund accounts are not new to the military departments but have not been used to the extent made necessary by PRIME.

There are two assumptions by which PRIME justifies the need for change to accrual accounting. First, PRIME assumes that there is a difference between obligations incurred for a specific purpose and the actual expenses incurred for that purpose. This difference is assumed to be of such magnitude as to warrant change to the system. Second, PRIME assumes that the Congress and executive branch managers do not have "control" of actual expenses incurred by operating units during any specified period of time. Accrual accounting and revised administrative control of funds, as discussed in the following paragraph, would presumably provide that control.

Administrative Control of Funds.--Existing military accounting systems place responsibility under the Anti-Deficiency Act on the managers responsible for controlling obligations. PRIME seeks to change this procedure by placing

the responsibility on the managers who use resources as well. To achieve this objective, PRIME would merge the two main operating appropriations, "Operations and Maintenance," which finances the costs of goods, services, and civilian personnel, and "Military Personnel," which, as its title implies, finances the costs of military personnel, into one supra-appropriation, "Operations." Operating budgets granted to military units under the one appropriation would carry with them the responsibility to comply with the Anti-Deficiency Act. Coupled with accrual accounting, this concept would give the Congress and the higher management levels of the executive branch the greater control over the actual operations of military units that PRIME's planners believe is required. This concept of PRIME has undergone considerable change because of the reaction of the Congress to PRIME and the concern expressed by the Congress specifically in regards to the Anti-Deficiency Act. The basic consideration has not been resolved as of the date of this study but will be examined in detail in Chapter V.

A Brief Summary of the Objectives and Concepts of PRIME

In the simplest of terms, PRIME seeks to establish a management environment in the DOD centered on financial or quantitative information, using techniques and concepts borrowed from commercial enterprises. In a statement which needs no further elaboration, Dr. Anthony quite adequately sums the objectives and concepts of PRIME as follows:

Reduced to fundamentals, the manager in a service organization [in the DOD] has the same function as the manager in a profit-seeking organization. The organization has a job to do, and it is the function of the manager to see to it that the job gets done well, and that resources are used efficiently in getting it done.

.....

In applying this general idea to the problem in government, we draw upon and adapt concepts developed in industry.

.....

We try to create the psychological stimulus provided by the profit motive by setting up competitive situations wherever it is feasible to do so--competitive in the sense that one Defense organization competes with another, and also in the sense that a Defense organization competes with outside organizations.¹³

¹³Robert N. Anthony, "The Challenge of Service Accounting," An Address to the American Accounting Association, August 30, 1967.

CHAPTER IV

THE PROCEDURAL CHANGES OF PRIME

Many of the changes gathered under the title of PRIME are very basic, procedural changes which could have been accomplished, regardless of their official designation as parts of PRIME. Many of the changes have, in fact, been instituted prior to, or despite, the general prohibition on the implementation of PRIME by the Congress. The procedural changes have encountered little difficulty in implementation and have not created any noticeable dissatisfactions or objections in the military departments. This does not imply that the changes are not of significance. To the contrary, the procedural changes of PRIME have brought about certain positive improvements to the Defense programming, budgeting, and accounting systems which have been needed for a long time. Since this study purports to be an examination of PRIME as a whole, objectivity demands that these changes be enumerated and their merits be given adequate consideration. Subsequent paragraphs of this chapter will discuss the procedural changes of PRIME and one major change in the U. S. Navy which, although not formally required by PRIME, necessarily preceded any Navy efforts to effectively implement the management

control techniques proposed by PRIME. That change will be discussed separately, and first to emphasize its importance.

The Reorganization of the Navy

The military commander is a "manager" in the broadest meaning of the word and PRIME accentuates the synonymity of command and management. The authority and responsibility to control the resources needed to accomplish a given task would seem to be a necessary concomitance of operational military command. Military commanders must be aware of all the consequences, including costs, of their decisions concerning operations, and should have the authority to determine the allocation of military resources based on operational considerations. Before June 1, 1966, such was not the case in the U. S. Navy.

In what has been probably the single most significant change to the organization of the Navy, the Chief of Naval Operations was on June 1, 1966, interposed in the chain of command between the Secretary of the Navy and the Chief of Naval Material, the Chief of Naval Personnel, and the Chief, Bureau of Medicine and Surgery. Prior to that change, the Chief of Naval Operations exercised command only over the fleet operating forces, and then only in military matters such as operations, security, intelligence, communications, discipline, and the like. Logistics support, including all funding of the operating forces and supporting shore stations, was provided by the three subordinate Chiefs mentioned, who reported directly to the Secretary of the Navy. The Chief of

Naval Operations, therefore, had no direct voice in the management of the resources he needed to conduct naval operations. This unusual situation existed in the Navy for almost 125 years and resisted repeated attempts at reform until the growing pressures for change, generated no doubt in part by the planning for PRIME, finally forced the reorganization.¹

The former separation of command and support channels flowed downward to the lowest levels of the Navy. Commanders were often in the unique position of having to answer to two different higher authorities who did not always give compatible directions to the commanders. Operating decisions were sometimes dictated by support constraints alone and decision-making was hampered accordingly. The June 1, 1966, reorganization corrected that situation. The Chief of Naval Operations now has the authority and responsibility for Navy financial management. Funding channels now conform to command lines.²

The importance of the realignment of Navy funding channels is attested to by the fact that the Congress appropriated \$2,500,000 to establish the Fleet Command Management System, the title of the revised funding system, while striking out the Navy's \$16,500,000 share of the \$52,700,000 requested by OSD to implement RMS/PRIME. Established in the

¹Thomas W. Ray, "The Bureaus Go On Forever . . .," United States Naval Institute Proceedings, XCIV, No. 1, Whole No. 779 (January, 1968).

²U.S., Department of the Navy, Office of the Comptroller of the Navy, "Resource Management Systems Bulletin Number Two," NAVSO P-3038, Washington, D. C., November 27, 1967, p. 1.

Office of the Chief of Naval Operations is the Budget Office (CNOBO), to perform command financial management functions. The Fleet Resources Office (FRO) has been established within the Chief of Naval Material organization to act as agent for CNOBO until CNOBO acquires the expertise required to fully assume all the responsibilities formerly performed by the Chief of Naval Material. As the CNOBO grows and matures, the FRO is expected to diminish in size and importance until its eventual demise.³

Programming Changes

Under the aegis of PRIME, ASD (C) has instituted revised procedures for the review and change of DOD programs contained in the DOD Five Year Defense Program (FYDP). The FYDP is the formal, approved plan for military forces projected to at least five years in the future. Program issues which would have a major qualitative or quantitative impact on military forces in the FYDP are identified annually prior to the beginning of the DOD budget cycle. Such issues, entitled "Major Force-Oriented Issues,"⁴ are brought to the attention of the highest levels of management in OSD and the military departments earlier under the new procedures than

³Robert H. Conn, Captain, U.S.N., Deputy Director, Chief of Naval Operations Budget Office, Address to the Students of the Navy Graduate Financial Management Program, The George Washington University, Washington, D. C., December 13, 1967.

⁴U.S., Department of Defense, Office of the Assistant Secretary of Defense (Comptroller), Memorandum, Subject: "Interim Operating Procedures No. 1 - Major Force Oriented Issues," Washington, D. C., June 29, 1966.

under the old, and in a more systematic manner. This change affords top management more time to resolve major issues during the budget cycle and focuses attention to the really important issues which require resolution. Another change involves the way in which the FYDP is changed during the budget cycle. "Program Change Requests"⁵ (PCR's) may be submitted at any time they are considered necessary so as to provide greater flexibility in both the formulation and execution of the budget. While neither of these changes represents a wholly new or different procedure, they do bring refinements to the programming system that will facilitate more orderly, systematic functioning of the DOD planning and programming process.

Probably the crucial determinant of the success of a programming system is the definition of programs, themselves. "The way in which a program structure is set up . . . can have a profound effect on the decisions that are reached, so that the design of programs should be regarded as an important part of the decision-making process,"⁶ states Arthur Smithies. In recognition of the fact that gradual changes to U. S. Defense policies and strategies had occurred over the years since the inception of PPB, PRIME revised the original nine Defense programs to ten more meaningful aggregations. The former programs

⁵U.S., Department of Defense, Office of the Assistant Secretary of Defense (Comptroller), Memorandum, Subject: "Interim Operating Procedures No. 2 - Program Change Requests (PCR)," Washington, D. C., June 30, 1966.

⁶Smithies, p. 41.

"Strategic Retaliatory Forces" and "Continental Air/Missile Defense Forces" have been combined into one program, "Strategic Forces." A new program, "Specialized Forces," has been established to include activities directly related to combat forces, such as intelligence, security, communications, and the like. The old nondescript program "General Support" has been broken into three more informative categories: "Logistics," "Personnel Support," and "Administration." The former program "Retired Pay" described nothing directly relatable to future national defense and has been completely eliminated and the costs distributed proportionately to other programs as part of military personnel costs. This change of PRIME would appear to have greatly strengthened the Defense decision-making process at higher levels. This change further demonstrates that OSD is aware of the need for flexibility in program definition and is willing to change programs as the environment requires.

PRIME further categorizes the programs as "Independent" or "Dependent." Independent programs are those programs which are concerned directly with the defense of the nation and which may be examined and acted upon independently. Dependent programs, the three support programs discussed above, vary as a function of the independent programs. PRIME, therefore, has pointed out that changes in the independent programs will induce a change in the dependent programs and that dependent programs cannot be examined without

consideration of the independent programs that they support. Before PRIME, no such differentiation was explicitly made.

Probably the most valuable change to the programming system is that approximately 1,100 precisely-defined, standard program "elements" have been established to correspond with organizational units.⁷ A program element is the smallest cost-collection entity in the DOD programming and budgeting system. Before PRIME, the program elements were designed without regard for the military organizations, hence the costing difficulties discussed in Chapter III. While there are a few military units that have unique, or multiple and diverse functions that make them difficult to fit in any one program, by far the majority of units can be so identified. Bringing program elements into conformity with organizational entities will enable the incorporation of the "cost building block" and "responsibility center" concepts into the military accounting systems.

In this connection, the Navy screened Unit Identification Codes (UIC's), the numerical codes by which organization units are identified in the accounting systems, against the standard program element definitions. UIC's have been identified to one program element and "dictionaries"⁸ compiled

⁷Meyer Tartasky, "Improvements to the Programming System, Department of Defense," U.S. Department of Defense, Office of the Assistant Secretary of Defense (Comptroller), Project PRIME Handbook, Washington, D. C., June, 1967, p. 15.

⁸U.S., Department of the Navy, Office of the Comptroller of the Navy, "Resource Management Systems Bulletin Number One," Washington, D. C., September 8, 1967, p. 4.

to provide the means to cross refer UIC's to either organizational unit or program element. The Navy accounting system can now, therefore, provide financial information for either organizational or program purposes. It must be noted that while this capability is exactly as envisioned by the cost building block concept, it in no way directly assures the validity or reliability of information so accumulated.

PRIME's changes to the programming system listed in this section all contribute to the increased effectiveness of the system. The writer must point out, however, that changes to the programming system are primarily for the benefit of OSD or higher management levels. No benefits directly visible to managers will accrue at the operating levels since none of the changes will essentially alter any of the existing procedures at the operating levels.

Standardization of Expense Data

As pointed out previously, cost accounting systems of the separate military departments differed in the categories in which costs were collected by function and end use. To bring uniformity to the process, ASD (C) promulgated thirteen definitions of functional categories, such as "mission operations," "maintenance of material," and seventeen definitions of end use elements of expense, such as "civilian personnel," "utilities and rent," and "printing and reproduction."⁹

⁹U.S., Department of Defense, Instruction 7220.20, "Expense Data Requirements," December 20, 1966.

Accounting systems of the military departments must be structured upon those definitions so as to collect costs by expense element, within functional categories, and further within program element. This change will permit comparison of costs among the military departments with the assurance that, at the least, the definitions of the costs and the understandings of what the costs represent are the same among all participants.

Distinction Between Investments and Expenses

To further facilitate comparisons of costs among military departments and to satisfy the long-standing recommendations that costs be distinguished between investments and expenses, OSD has established absolute criteria by which costs may be classified to one or the other of the two, mutually-exclusive types.¹⁰ The decision rules by which managers will classify the two costs are explicit and detailed. One conditional, arbitrary rule included in the OSD directive on the subject may produce some unexpected and dysfunctional managerial behavior. That rule and its possible consequences will be discussed at length in the context of the larger full costing problem examined in Chapter V. Nevertheless, a standard procedure now exists to provide for clearly-defined differentiation of investment and expenses in programming, budgeting, and accounting throughout the DOD.

¹⁰U.S., Department of Defense, Instruction 7040.5, "Definition of Expenses and Investment Costs," September 1, 1966.

Purification of Appropriations

In addition to establishing investment and expense cost criteria, DOD Instruction 7040.5 directs that expenses only will be financed by the Operations and Maintenance and Military Personnel appropriations, and by no other appropriation. Investments will be financed by Procurement and Military Construction appropriations, and no other.¹¹ The criteria established by OSD differ in many respects from the criteria formerly applied in the Navy. In fact, Navy criteria were not embodied in any one set of decision rules but were individually established by each technical bureau or office for the particular material under its control. Consequently, considerable adjustment of items between appropriations has been required, the "purification" of appropriations. The effect in the Navy alone has been the transfer of approximately 550,000 line items of material with a dollar value of about \$1,100,000,000.¹² The ultimate effect of the purification of appropriations is that the appropriation structure itself now segregates investments from expenses. Budgets to the Congress, therefore, can be analyzed separately for the two types of costs, satisfying the recommendation to that end which has been outstanding for over fifty years.

¹¹Ibid., p. 2.

¹²William H. Johnson, Commander, U.S.N., Special Projects Division, Director of Financial Services, Office of the Comptroller of the Navy, in an Address to the Students of the Navy Graduate Financial Management Program, The George Washington University, Washington, D. C., November 15, 1967.

Because of PRIME, the Navy Stock Fund is to be extended to some eighty additional naval activities in fiscal year 1968 in anticipation of implementation of PRIME on July 1, 1968.¹⁴

Industrial Funds.--Industrial funds provide the working capital for industrial or commercial-type activities, such as shipyards, printing plants, overhaul and repair facilities, etc. As with stock funds, industrial funds are reimbursed from the operating funds of units which receive services from the industrial activity. The industrial fund provides the ideal mechanism to achieve PRIME's goal of charging full costs to military units for services received from other units. In the Navy, again as with stock funds, the industrial fund has already been extensively applied. As of 1960, sixty-two naval activities were financed under the Navy Industrial Fund.¹⁵ Only twenty-seven additional activities have or will be industrially funded because of PRIME.¹⁶

A Summary on Procedural Changes

The changes presented in this Chapter will bring about important improvements to DOD programming, budgeting, and accounting systems. The programming process is more

¹⁴U.S., "Resource Management Systems Bulletin Number Two," p. 12.

¹⁵U.S., Financial Management in the Navy, p. 12.

¹⁶U.S., "Resource Management Systems Bulletin Number Two," p. 10.

systematic and focuses more attention to management by exception. The cost building block concept is a reality and military accounting systems should now have the capability to provide financial information for almost any programming, budgeting, or organizational need. Costs are uniformly defined throughout the DOD and working capital funds will enhance the value and meaning of reported costs. All of the changes except for application of working capital funds at certain facilities have been implemented. Since none of the PRIME changes represents a departure from existing military management philosophy, no difficulty in operating under the revised procedures can be foreseen. It must be noted, however, that only the reorganization of the Navy promises to change managerial behavior, by greatly increasing the authority of operating managers to make decisions concerning the allocation of resources. All the other changes listed in this Chapter will provide direct, visible benefits to top-level management, only.

CHAPTER V

THE CONCEPTUAL CHANGES OF PRIME

The objective of PRIME to establish a more effective management control system in DOD is unassailable. The concepts upon which PRIME is based, developed from proved commercial applications and the thinking of authoritative theoreticians, would also seem invulnerable to criticism. And yet, there exists the undercurrent of resistance to PRIME in the DOD and the very real objections of the Congress to PRIME discussed in previous chapters. It is the belief of this writer that the sources of the adverse reactions to PRIME lie in the changes to management concepts which PRIME would introduce into the military management processes.

To achieve the management control system intended by its planners, PRIME would make some changes which represent extreme departures from existing military management philosophies. This chapter will examine PRIME's conceptual changes, as translated into guidelines and directives by OSD and ASD (C), in relation to the practical realities of the situation in which PRIME is to function. This study intends to point out the areas where PRIME appears to have overlooked or disregarded negative consequences of PRIME or dysfunctional

managerial behavior which PRIME may induce. PRIME is founded on the basic assumption that existing military resource management systems are ineffective, at best. The alternatives offered by PRIME, however, may yield no improvement at all. Indeed, some parts of PRIME may be harmful in the long run, as this chapter will attempt to demonstrate. The following paragraphs examine the conceptual changes of PRIME in the order of appearance in Chapter III.

Full Costing

DOD Instruction 7220.22 of January 10, 1967, entitled "Accounting System for Operations"¹ is the basic OSD directive which establishes guidelines for the design of Defense operating expense accounting systems. Operating expense information, gathered under the accrual basis of accounting, is to be used to support programming and budgeting and to aid operating managers. To bring into being PRIME's objectives of full costing so as to enhance the use of operating expense information, DOD Instruction 7220.22 prescribes certain explicit requirements. Those requirements will be explored in the following paragraphs under the headings of the particular types of expenses involved.

Military Personnel Costs.--Paragraph IV.G.2 of DOD Instruction states: "Active force military personnel services will be charged to expense accounts at standard rates in

¹U.S., Department of Defense, Instruction 7220.22, "Accounting System for Operations," January 10, 1967.

accordance with instruction contained in [DOD Instruction 7220.15]."² That Instruction prescribes detailed procedures for " . . . budgeting, accounting, and reporting for the cost of military personnel services . . . as an element of operating costs."³ Military personnel costs of every DOD organizational unit based within the continental United States, including tactical and combat forces, will be charged as a cost of operation of the unit where the military personnel services are performed. The costs of military personnel stationed outside the continental United States may, at this time, be reported in the aggregate by the military departments, without detail to the unit level. Costs are to be computed at prescribed standard rates on a forty-hour week, fifty-two-week year basis, regardless of the actual employment of the individual military personnel involved.

It is at this point that the planning for PRIME ignored or disregarded practical considerations which will bear on the effectiveness of PRIME as a management control device. The first, and most important difficulty in charging the costs of military personnel costs to the unit level as an element of expense is that, with virtually no exceptions, the unit commander has no control whatsoever over the assignment of military personnel to his unit. In the Navy, "The Bureau of Naval

²Ibid., p. 3.

³U.S., Department of Defense, Instruction 7220.15, "Budgeting and Accounting for the Cost of Military Personnel Services," June 1, 1966, p. 1.

Personnel shall be responsible for . . . the procurement and distribution of all personnel of the Navy. . . . establishing complements and allowances of personnel of the Navy for all activities of the Navy, ashore and afloat. . . . the preparation of estimates for funds necessary for the pay and allowances of personnel of the Navy."⁴ The Bureau of Naval Personnel (BUPERS) is the central personnel manager for all of the Navy. Through an extensive automated system, BUPERS matches the inflow, outflow, and on-board count of naval personnel and distributes available personnel according to decision rules which are designed to serve the best interests of the whole Navy. Numbers and types of military personnel allowed to each unit are set or revised on an individual unit basis at the highest level of management in BUPERS and the Office of the Chief of Naval Operations after consideration of a number of factors, including complex staffing criteria and the missions and tasks assigned to the unit. Unit commanders can recommend, request, or comment to BUPERS, but can in no way control the number or quality of personnel assigned to their unit.

A second major difficulty in charging military personnel costs to the operating unit is that promotions, which cause an increase to entitlements to pay, of all naval personnel except the lowest three pay grades are administered centrally for the whole Navy. The unit commander can demote

⁴U.S., Department of the Navy, U. S. Navy Regulations, 1948, Art. 0440, p. 45.

personnel for disciplinary reasons or withhold enlisted promotions for disciplinary or certain other disqualifying reasons, but cannot in any real sense control, or even anticipate the level of that element of military personnel pay costs.

A third difficulty in the costing system prescribed by DOD Instruction 7220.15 is that costing is at standard rates. Over the Navy as a whole, the actual costs of all naval personnel should approximate the total computed from standard rates. But, since the standard rate for any pay grade is an average, there are personnel who are paid at rates above and below the standard, average rate. In any given unit, therefore, the unit commander may be charged amounts for military personnel costs which are at variance with the amounts actually applicable to the personnel assigned to his unit.

The purposes of charging military personnel costs to the organizational unit level are, as previously indicated, to determine the full cost of operations of units for planning, programming, and budgeting purposes and to motivate managers. Although Dr. Anthony recently stated " . . . the system associates expenses with the managers responsible for incurring them" ⁵ (emphasis mine), PRIME clearly does not do so. The unit commander does not control the number or

⁵Robert N. Anthony, "Some Problems in Communication," An Address to the Federal Government Accountant's Symposium, June 14, 1967.

types of military personnel provided to him nor, consequently, the cost of their services. Therefore it is difficult to accept the premise that he is responsible for incurring those costs. It is true that the commander is responsible for military personnel in the sense of being accountable for the effective use of the personnel provided to him, but it does not follow that he will be positively motivated to try to "manage" military personnel for financial reasons. In fact, since he has no authority to manage the inflow or outflow of personnel, this requirement of PRIME is without any substantial utility as a device for motivation at the unit level. In addition, because of the complexity of the personnel distribution processes and the need to maintain the proper balance of personnel among all naval units, it is unlikely that the unit commander would ever have much flexibility in determining the allocation of military personnel.

It would seem reasonable that if a manager is to be charged for, and his performance evaluated on costs, the manager should have some degree of control over the magnitude of the costs. In this respect, Myron J. Gordon lists as the first rule for the pricing of inputs that " . . . , they should reflect the authority that has been delegated to the manager. In other words, he should only be charged with costs over which he has control or administrative responsibility."⁶

⁶Myron J. Gordon, "The Use of Administered Price Systems to Control Large Organizations," Management Controls: New Directions in Basic Research, ed. Charles P. Bonini and others (New York: McGraw-Hill Book Company, 1964), p. 5.

It is obvious that since the commander has no control over military personnel costs in fact, this requirement of PRIME may act more as a nuisance than as a motivator toward more efficient management at the operating level. Furthermore, the amount the unit commander will be charged for the use of his military personnel can, indeed must, vary from the amount truly incurred by those personnel. It will be difficult to convince the unit commander that since the standard rate will "average out" over the Navy as a whole, he should accept them as a meaningful measure of the costs for which he will be held responsible, especially the commanders of that half of the naval personnel who will actually earn less than the average rate but who will nevertheless be charged at the "full price" to the commander. The nuisance factor generated by PRIME will therefore be even more aggravated.

One effect of making the unit commander financially responsible, hence more aware of military personnel costs may be to motivate the commander to review personnel requirements more actively and to request or recommend changes more frequently. If the commander feels that the personnel distribution system is faulty, he may be encouraged more under PRIME to complain and point out the faults of the system. These minor benefits do not seem to be strong justification for the use of military personnel costs for management control purposes.

Military personnel costs can be computed for each organizational unit and program element for planning,

programming, and budgeting purposes at the BUPERS level, using the existing personnel reporting systems and the same standard rates set by PRIME. The results of such a computation should not differ significantly from PRIME's results, provided that the personnel reporting systems are reasonably accurate. If they are not, it would appear to be more economical to improve the existing systems rather than install the wholly new, duplicating, overlapping system proposed by PRIME.

The goal of PRIME to instill managerial motivation toward efficiency at the operating level will be achieved only nominally unless and until the entire military personnel management process is changed from top to bottom. Recommendations or requests for changes in personnel allowances, which are the only actions presently available to unit commanders, are not processed quickly enough to be of any short term management benefit. Until the operating commander has genuine freedom to act and to exercise some discretion in setting his military personnel levels, it would appear that the requirement of PRIME to charge military personnel costs to the operating level for management control purposes is not justified. The writer could find no indication that any change to increase the freedom of unit commanders to manage their personnel allowance is contemplated in the foreseeable future. It is the belief of the writer, therefore, that while this requirement of PRIME is conceptually sound, given the proper conditions, such conditions do not exist. PRIME is far too

ambitious in this requirement and should be tempered according to the existing military personnel management situation.

Maintenance of Investment-Type Items.--The OSD definition of investment-type items includes "major end items of equipment,"⁷ which includes complete aircraft, for instance, and "reparable assemblies, spares, and repair parts which are centrally managed recoverable items and which are designated reparable because unserviceable quantities are considered by the inventory manager in its requirements determination."⁸ This definition includes the majority of components, assemblies, and other replaceable aeronautical material and airborne electronic and ordnance devices required for the maintenance of naval aircraft. The OSD requirement that the "cost of maintenance, repair, overhaul, or rework of investment items is expense"⁹ is logical and reasonable. But in attempting to carry this requirement to the operating level under the concept of full costing, PRIME has created some difficulties.

Aviation maintenance in the Navy is conducted in three levels which are as follows:

Organizational, which is the level of maintenance that the aviation squadron or unit can organically perform without assistance using only the limited amount of tools and

⁷DOD Instruction 7040.5, p. 3.

⁸Ibid., p. 4.

⁹Ibid., p. 3.

equipment that the squadron can carry with it as a mobile unit. The depth and nature of maintenance at the organizational level is relatively minor.

Intermediate, which is performed in shops at the base level. Intermediate-level facilities serve the base, tenant, or transient squadrons and aircraft and perform a relatively heavy level of maintenance. Intermediate-level facilities are designed on the principle of "economy of scale," pooling limited amounts of relatively costly tools and test and support equipment and limited numbers of skilled aviation maintenance technicians in facilities at the scene of aircraft operations, the aviation base.

Depot, which is the complete overhaul and repair of aeronautical material carried out on a centrally-managed and located basis for the whole Navy.

The paramount objective of maintenance at the aviation unit level is to make aircraft ready for safe flight so as to carry out the ultimate mission of the unit: aircraft operations. Because of the limited amount of tools, equipment, and the relatively small number of skilled technicians available, the responsibility of the aviation unit for maintenance is generally restricted to light preventative maintenance and the trouble-shooting and removal and replacement of unserviceable items. Items become unserviceable for a number of reasons, including material failure, "high time" (which is mandatory removal at some specified operating interval,

usually hours of operation, for complete overhaul), or mandatory removal and return to a higher maintenance level for incorporation of modifications directed by higher authority. If the removed item cannot be returned to serviceable condition at the organizational level, the aviation unit exchanges it for a serviceable item which is installed on the aircraft to return it to ready status. The unserviceable item is either made serviceable at the intermediate-level facility serving the unit or returned to the designated overhaul point (the depot-level maintenance facility) for the required maintenance or modification action.

Under the Navy system for management of aviation maintenance facilities, funds are applied at the level where the maintenance is actually performed and each level is responsible for, and manages, its resources so as to optimize its output of items returned to serviceable condition in relation to cost. In the case of the aviation unit, since the majority of maintenance actions are removal, exchange, and replacement of unserviceable items, no cost is charged directly to the aviation unit. Because the majority of aeronautical items are peculiar to one, or a very few, aircraft types, and in turn aircraft types can be related to only one program element, maintenance costs can be identified to program element for planning, programming, and budgeting purposes. There are exceptions to this general proposition, but they are minor in relation to the total volume of maintenance actions and costs.

While the Navy system can satisfy the information needs for planning, programming, and budgeting, it does not conform to PRIME's goal of full costing at the operating level for management control purposes. To implement that goal, OSD directives are quite explicit in requiring that the cost of maintenance of investment-type items be charged as an expense at the aviation unit level. DOD Instruction 7220.22 directs that "reparable assemblies, repair parts, and other items issued from stocks of investment items on an exchange basis . . . will be charged at exchange prices in accordance with [DOD Instruction 7220.19]"¹⁰ and further, in the case of items which are made serviceable at the intermediate-level maintenance facility and returned to the aviation unit for reinstallation, "charges for services rendered by a service unit . . . will be at standard costs, or actual costs, whichever is more feasible."¹¹ DOD Instruction 7220.19 further details the procedure as follows:

The cost of equipment maintenance performed at organizational and base/installation levels will be charged directly as expense of the program element and using activity or unit at the time maintenance is performed. Investment-type recoverable components issued from supply to replace unserviceable components as required in the equipment maintenance process will be charged to the maintenance function on the following basis:

1. If the repair required is performed at base level, the charge will be determined at base level.

¹⁰DOD Instruction 7220.22, p. 3.

¹¹Ibid., p. 3.

2. If the repair required cannot be performed locally, then a standard price, hereafter referred to as the "standard repair price" will be used.¹² (Emphasis mine.)

This provision is the logical theoretical extension of the full costing concept. PRIME assumes that in having to pay the costs of maintenance of investment-type items the unit commander will be motivated to make "better" operating and maintenance decisions. PRIME assumes that the unit commander is somehow responsible for causing the maintenance action, hence he must pay the cost. This philosophy was expressed earlier by Dr. Anthony in his Management Accounting, Text and Cases as follows: "This [the maintenance function] is partly the responsibility of the operating department foreman [analogous to the unit commander] who can influence the amount of required maintenance work by how well he takes care of his equipment."¹³

Only in the extreme cases of abuse, neglect, or gross carelessness can a unit commander affect aviation maintenance by "how well he takes care of his equipment." Taking care of his equipment, as previously stated, consists primarily of replacing unserviceable items so as to achieve his predominant objective of conducting flight operations. Maintenance actions performed at the unit level are explicitly prescribed

¹²U.S., Department of Defense, Instruction 7220.19, "Charges for Maintenance of Investment-Type Equipment," December 20, 1966, p. 1.

¹³Anthony, Management Accounting, Text and Cases, p. 362.

by higher authority with the specific intent of encouraging --motivating--the unit commander to manage his maintenance effort to the end of having 100 per cent of the unit's aircraft ready for safe, mission-productive flight. Costs of maintenance, as such, are considered secondary to the overriding goal of achieving full mission readiness at the operating level.

It is true that the present maintenance management system does not in itself encourage efficiency. In the interests of achieving maximum effectiveness, units may perform more maintenance than is actually needed. Further, since the aviation unit is not given a cost charge for the exchange of investment-type aeronautical items, there is no direct motivation for the aviation units to actively investigate unserviceable items to determine if they can be returned to service at the unit level. PRIME seeks to curb any unnecessary maintenance and to provide the motivation needed to encourage repair of unserviceable items at the lowest possible level.

There is no conceptual conflict between PRIME's objective of efficiency and the present maintenance management system's objective of effectiveness. By stressing the measurement of costs of the maintenance of investment-type items at the unit level, however, PRIME will create a wholly new maintenance management environment at the operating level. The tone of that environment will be set by the process described

as follows by Peter Drucker: ". . . the fact that this or that set of phenomena is being singled out for being 'controlled' signals that it is being considered to be important."¹⁴ The rational unit commander would, therefore, seek to minimize his maintenance costs within sound maintenance limits so as to present the best possible picture of efficiency to his superiors. As long as the amount of funds available to the unit commander is sufficient to finance all required operations and maintenance, there will be no problems. But if funds are restricted, and they have been on many occasions in the past, the commander must decide where to reduce his costs to remain within funding limitations. Flight operations are highly visible to, indeed directed by, the commander's superiors. Maintenance, on the other hand, is visible in the short term only to the unit commander himself. The natural tendency of commanders who desire to satisfy their superiors in the short term will therefore be to continue to fly as directed but to forego as much maintenance as is required to provide funds for flight operations. They will, in effect, trade almost invisible maintenance for highly visible flight operations.

It is the contention of this writer that the requirement of PRIME to charge the costs of maintenance of investment-type items to the aviation unit contains more possible danger

¹⁴Peter F. Drucker, "Controls, Control, and Management," Management Controls: New Directions in Basic Research, ed. Charles P. Bonini and others (New York: McGraw-Hill Book Company, 1964), p. 288.

than good, especially if funds are restricted. And funds are now severely restricted because of the armed hostilities in Southeast Asia and promise to remain restricted for a long time to come. This requirement of PRIME is conceptually sound given the proper funding conditions, but the realities of the present-day situation inject a genuine danger. While it is, of course, highly desirable to promote efficiency in the aviation maintenance process, it is far more desirable to insure that required maintenance of Navy aircraft is actually carried out. It is in the best interests of the Navy and the U. S. taxpayer that the multi-billion-dollar investment in aircraft is protected by proper maintenance on time, every time it is required. Any maintenance short of that mark will endanger not only combat readiness and the defense posture of the nation but also the safety of flight. And in the words of a senior naval aviator, Captain Robert H. Conn, U.S.N., "We don't want to put the Navy in a position where we jeopardize safety for dollars."¹⁵ The possibility of motivation to make the maintenance schedule conform to funding constraints is not remote. In fact, by exposing costs as the central value to be optimized, such motivation will surely follow, exactly as PRIME's planners intend. It is suggested that in view of the present dangers involved, this requirement of PRIME should be held in abeyance until more normal funding and operating conditions prevail.

¹⁵Conn.

In addition to the harmful motivational consequences discussed above, PRIME will produce distortions to the measurement of true, accurate costs at the operating level. Budgeting will be weakened accordingly, and the use of cost information for control purposes made correspondingly more difficult. The problems of this situation are presented succinctly in the following extract from a Navy memorandum on the subject:

Aircraft overhaul requirements are based on a time factor (months between overhaul), while engine overhauls are prescribed based on operating hours. Thus a squadron commander cannot exercise any real control over the use of overhaul funds. The squadron commander has no control over the assignment of aircraft to his squadron. Thus one squadron may be assigned aircraft which are near the end of their service tour or which have high-time engines which will necessitate that particular squadron to finance aircraft or engine exchanges even though the squadron did not, in reality, consume the resources. Conversely, a squadron might be equipped with new aircraft and low-time engines and would have few overhaul requirements. Costs accumulated at the user level under these circumstances are not meaningful for control purposes or for the purpose of measuring squadron efficiency.¹⁶

Costs gathered under PRIME, therefore, will not be suitable for management control purposes at the operating level unless accompanied by extensive footnotes or adjusted to mitigate the effects of the distortions to the true costs of resources consumed by each unit which PRIME will cause. And what additional motivation might accrue in the situation described above? The unit commander can be expected to do

¹⁶Memorandum from G. W. Sjogren to L. W. Carlson and others, Department of the Navy, Office of the Comptroller of the Navy, Memorandum NCFS 352 7300/1, Washington, D. C., November 21, 1967.

little more than complain about:

1. Having to pay for the maintenance of items which his unit did not use for a length of time which the commander perceives to be equitable.

2. Having to pay a price which he believes to be too high for items maintained by other organizations.

3. PRIME. And since PRIME is the "decision which has been made," this last possibility is futile. The first two possibilities may bring about some changes to the aircraft assignment practices or promote some efficiency in maintenance practices at higher maintenance levels. In any case, this requirement of PRIME will generate some dissatisfaction, constructive or otherwise, at the operating level.

Evaluation of the benefits and sacrifices involved in the application of investment-type items at the operating level for management control purposes would seem to indicate that PRIME needs further refinement at this time. PRIME's planners considered purely theoretical matters only and ignored or overlooked the real situation which now exists in the aviation maintenance management system. This requirement of PRIME, therefore, should be held in abeyance until a more stable financial environment returns to the DOD and until provision to recognize the possible distortion of the measurement of the true costs of resources consumed is built into the system. It is understood informally by the writer that OSD is considering just such a waiver of this requirement.

Modification of Investment-Type Items.--The requirements of PRIME concerning the cost of modification of investment-type items is not directly related to the full costing concept. Because the nature of the problem is closely associated with the material just presented it is discussed at this point in the study to preserve continuity. DOD Instruction 7040.5 defines modification as " . . . the alteration, conversion or modification of [investment-type items] which changes or improves the basic character, purpose or operational capacity in relation to effectiveness, efficiency or safety."¹⁷ Modifications of aeronautical items can be classed in two general categories: those which involve the safety of flight or are of such urgent operational importance as to require immediate installation, and those which may be deferred to some later time. The OSD directives regulating the costing of modifications to investment-type items will be examined in this context.

DOD Instruction 7040.5 directs that the costs of modification performed at the organizational or intermediate levels be charged as expenses, to Operations and Maintenance appropriations. At the depot level, however, modification costs may be charged as investments to Procurement appropriations.¹⁸ The reasons for this arbitrary differentiation between expenses and investments purely on the basis of the

¹⁷DOD Instruction 7040.5, p. 5.

¹⁸Ibid., pp. 2, 5.

level of maintenance at which the modification is performed is unknown. It is surmised that the basic reason is for expediency, alone. The organizational and intermediate levels of maintenance are rarely, if ever, recipients of Procurement funds, and it is naturally more expedient to require those levels to charge modifications to expense rather than have to provide Procurement funds to those levels.

Yielding to expediency in this case may be practical, but it must be recognized that it introduces distortion to the true nature of the costs collected by PRIME. The nature of modification costs is the same, regardless of the level at which the modification is performed. PRIME would ignore this fact and report modification costs in both of the "mutually exclusive"¹⁹ categories. The validity of cost information so gathered by PRIME would be lessened accordingly.

The requirement that modification costs be borne as expenses at the organizational and intermediate level also carries with it a message: Do not perform any more modifications than are absolutely necessary. Knowing that modifications must be charged as expense, the lower two levels will be motivated to perform only the modifications which require immediate installation. Those levels will be encouraged to defer indefinitely those modifications which can be deferred, until the aeronautical items concerned are ultimately returned to the depot level for complete overhaul. This fault of PRIME

¹⁹Ibid., p. 2.

is to some extent true under existing procedures. But, coupled with the requirement of PRIME that the unit must pay a standard maintenance cost for the exchange of unserviceable for serviceable items, the motivation to forego modifications will be strengthened. Why pay to modify items on hand when they can be ultimately exchanged for items which will have the modification installed, at no extra cost? There is no easy solution to this problem within or without the framework of PRIME except for application of more stringent nonmonetary constraints in the maintenance management systems.

Another unusual rule set by PRIME is that

When modification and maintenance are done concurrently at depot level, the total effort will be investment when the costs for modification, including the cost of investment items of equipment to be installed, are greater than the costs to perform the required maintenance exclusive of any modification. Otherwise, maintenance performed at depot level is an expense.²⁰

If the maintenance of investment-type items is truly an expense, why should it be transformed into an investment because it happened to be performed coincident with modification? Is not the true nature of maintenance costs the same regardless of concurrence with modification costs? It is suggested that PRIME would better serve its purposes by eliminating the two arbitrary conditional rules discussed above and adhering to its basic rules: the costs of maintenance are expense and the costs of modification are investment.

Neither of the preceding problems concerning

²⁰Ibid., p. 5.

modification costs are of such magnitude as to cause alarm. It is necessary to point out these arbitrary features, however, to show that PRIME is not always based on consistent application of concepts and further that PRIME will not provide the completely reliable, accurate cost information promised by its proponents. The real significance of these features is that PRIME is expedient at the expense of accuracy whenever PRIME's planners deem it prudent.

A Summary of Full Costing.--The application of the full costing concept to DOD accounting systems by PRIME involves many more requirements than are presented in this study. The situations cited are illustrative of the manner in which PRIME applies the full costing concept and present the major problems which the writer believes to be facing PRIME at this time. As has been shown, those problems are of significance to the success or failure of PRIME and apparently have not been given adequate consideration.

Since PRIME can be expedient where it chooses to be, the inference is strong that PRIME could have been more selective in applying the full costing concept had its planners recognized the need to be selective. While the full costing concept is fundamentally sound, PRIME has not given adequate regard to the conditions which exist in reality at this time in the Defense establishment.

A more restrained, gradual infusion of the full costing concept, tailored to give more recognition to the situations discussed in this study would have been a more desirable

approach. The ultimate arbiter of Federal Government accounting systems, the GAO, provides the following guidelines on cost accounting which adequately describe some considerations to which PRIME's planners might have given more attention:

Cost data provided for management and congressional use must be reasonably accurate to be of valid use in making evaluations or decisions. At the same time, unnecessary precision and refinement of such data should be avoided.

.....

Proper evaluations of cost of performance by areas of responsibility can be made only with respect to costs that are controllable by the person being held accountable.

.....

Cost-finding techniques involve the production of cost data by analytical or sampling methods Because of the complexity of some Government operations, it is sometimes just as satisfactory, as well as more economical, to use cost-finding techniques to produce cost data²¹ (Emphasis mine.)

Integration of Programming, Budgeting, and Accounting

One goal of PRIME is to " . . . close the programming-budgeting-accounting-management loop,"²² by thoroughly integrating each segment of that loop. Much of that goal has been achieved procedurally by revising the program elements and introducing the responsibility center and cost building block concepts. The accounting systems, organizational structures, and program structure now conform to one another. Supporting

²¹U.S., The Comptroller General of the United States, Accounting Principles and Standards for Federal Agencies Washington, D. C.: U. S. Government Printing Office, 1965 with 1967 Revisions), pp. 2-51 - 2-54.

²²DOD, "A Primer on Project PRIME," p. 29.

those changes are the standardization of expense and investment cost definitions and collection procedures. But PRIME is not content with the degree of integration that the procedural changes will provide.

The thinking of PRIME's planners is that the budget and the appropriation structure also should be restructured to conform to the DOD program structure. PRIME would merge the two appropriations Operations and Maintenance and Military Personnel into one supra-appropriation, "Operations." Further, the budget would be changed, as stated by Secretary McNamara, to " . . . a form that summarizes proposed operating expenses by major organizational entities and programs."²³ This approach to budgeting is opposed to the present organization/appropriation/budget activity structure of the present budget which is supported by program analyses. The assumptions which motivate PRIME's planners to propose these changes are that without total conformity of all systems to the program structure, there will be " . . . no assurance that the plans will be actually turned into actions,"²⁴ and that otherwise, " . . . there is, at best, only an indirect way of actually tracking performance against plans."²⁵

The Congress is not receptive to this line of thinking, as evidenced by the following statement of the House Committee on Appropriations:

²³McNamara to Mahon.

²⁴DOD, "A Primer on Project PRIME," p. 28.

²⁵Ibid.

There are a number of pitfalls that can be foreseen with respect to the proposed system, not the least of which is the inflexibility of the program structure which would necessarily follow. At present the program structure, being independent of the budgeting and accounting system, can be altered or redirected as circumstance or prudent management appears to require. Once such a program system becomes legislative history in support of an appropriation act it can be changed only by some further legislative expression.²⁶

Not only does the Congress oppose the change, such change does not appear to even be necessary. David Novick, one of the earliest proponents of program budgeting in the Federal Government, explains that:

It is, of course, a virtue of [program budgeting] . . . that it does not require a change in budget format. Planning and programming are simply superimposed on the budget and govern its substance, although not its form.²⁷

And in further substantiation of the opposition to PRIME, Charles J. Hitch, former Assistant Secretary of Defense (Comptroller) and chief architect of DOD's planning, programming, and budgeting system, the prototype for all of the Federal Government, is equally explicit:

. . . the existing budget structure serves some very useful purposes Although military planning and the formulation of programs should logically be done in terms of missions and forces, the Department must be managed not only in those terms but also in terms of resources. . . . division of the budget by broad input category or resource categories also provides needed flexibility for the adjustments in the program that are inevitably required in the course of the budget year.

²⁶House Committee on Appropriations, DOD Appropriations Bill, 1968, pp. 6-7.

²⁷David Novick, "The Department of Defense," Program Budgeting, Program Analysis and the Federal Government (Cambridge, Massachusetts: Harvard University Press, 1965), p. 105.

. . . It is important not to freeze programs in appropriation bills.²⁸ (Emphasis mine.)

The remarks quoted above as to the unnecessary nature of PRIME's proposal to structure the DOD appropriations, hence the budget, on programs needs no elaboration by the writer. It may be of interest to speculate further into the reason, other than those officially stated, for the reaction of the Congress. The proposed change in budget format would greatly affect the way in which the Congress reviews and enacts appropriations. The Committees on Appropriations of both houses of the Congress are composed of members who have many, many years of individual and collective experience in analyzing DOD appropriation requests. It is natural to expect that they would oppose a change which would render their expertise relatively useless. The change would force them to rely on OSD analyses until the individual members could reacquire the analytical skills necessary to review the DOD appropriation requests in the new format. The Congress has been openly reluctant to rely on OSD analyses in the past; they can hardly be expected to acquiesce to even temporary reliance on OSD in the future. Former Defense Comptroller Hitch recognized this fact and the preeminence of the Congress in budgetary matters,²⁹ along with the other shortcomings of structuring the budget

²⁸Charles J. Hitch, Decision-Making for Defense (Berkeley and Los Angeles, California: University of California Press, 1965), pp. 29-30.

²⁹Ibid.

in program terms. PRIME's planners, however, either ignored or discounted the importance of the attitudes of the Congress and in so doing aroused Congressional opposition to the degree that may be the most significant reason that the Congress prohibited implementation of RMS/PRIME.

To satisfy the Congress, present OSD plans state that the budget and appropriation structures will continue to be submitted to the Congress in the pre-PRIME form. At the military department level, however, the appropriations enacted by the Congress will be combined and converted to single operating budgets within the program structure which will flow downward through the organization. Accounting at the operating levels will be for the single operating budgets, but reports flowing upward in the organization will be reconverted to appropriation structure at the military department level. It would appear, therefore, that despite the merits or demerits of changing the budget or appropriation structures, total integration of programming, budgeting, and accounting may be accomplished.

Decentralized Decision Making

Decentralization of decision making, repeatedly stressed in the unofficial literature of PRIME, remains largely a concept at this time. Except for superficial increases in flexibility at the operating level, nonmonetary resource constraints that existed before PRIME are still in force. In particular, military personnel allocation decisions are still centrally made. And since military personnel costs

are fully one-half of the total operating costs of the DOD, meaningful flexibility at the operating level promises to remain an ideal.

Decentralization of decision making in organizations is a subject worthy of its own study. It must be pointed out that successful decentralization depends more on the skill and competence of the managers involved than on any particular management control system. PRIME would thrust the role of "manager" on many Defense commanders who are neither accustomed to thinking in terms of resource management nor schooled in management disciplines. Until Defense commanders become managers in fact, as well as by decree, through training, education, and experience, it is just as well that decentralization of decision making be approached with care in the DOD. It is probably in recognition of this situation that OSD has not to date directed any specific decentralization as such.

Output Measurement

Although RMS/PRIME stresses the measurement of outputs as a necessity for successful management, specific, official guidance concerning output measurement has not yet been promulgated by OSD. While the planning for and the implementation of the elements of PRIME dealing with measurement of inputs has moved at a rapid pace, output measurement has been relegated to a position of lesser importance. Evaluation of performance--output--of military units in the existing DOD systems generally consists of intermediate commanders'

subjective appraisals of the effectiveness of their subordinates. A few restrictive quantitative measures such as aircraft flight hours and ship steaming hours provide some limited assistance in the appraisal process. Those measures are quite useful for incremental budgeting and financial management purposes but do not provide sufficient description of the true nature of output to be useful in a broad managerial sense. Apart from the management systems as such, "readiness" indices provide operational commanders, primarily the Joint Chiefs of Staff, with current status in relation to ability to perform assigned missions and tasks. Readiness indices, too, in their present form, do not provide a meaningful indicator of the output of military units.

In response to a memorandum from Secretary McNamara dated March 3, 1967, Assistant Secretary of Defense (Comptroller) Anthony commissioned a joint study group on May 12, 1967, to examine the output measurement problem. The principles set forth by Dr. Anthony to guide the study group are quoted in part as follows:

Output is defined as either (a) actual execution of an assigned mission or function or, (b) the capability of performing those missions and functions for which officially configured.

. . . the information must reflect not only output as of a given time, but also significant changes in output.

Output should be measured quantitatively, and preferably on a continuum.

The information must be derived by auditable means.

The measurement of output should be relatable to measures of input, that is, to resources consumed.³⁰

Following the work of the joint study group, OSD established the "Directorate for Output Measurement Systems" under the Deputy Assistant Secretary of Defense (Management Systems Development) in the Office of the Assistant Secretary of Defense (Comptroller). The Directorate of Output Measurement Systems is charged with the task to " . . . develop, design, and implement systematic methods and procedures to measure and report output . . . of DOD organizations."³¹

The rationale upon which the Directorate of Output Measurement Systems bases the planning now in progress is that Defense managers can " . . . establish unique correlations, i.e., to determine what specific changes in performance can be expected as a result of a given change in resources available,"³² and that relationships so established can be used as the basis for resource allocation decisions. The Directorate defines output as "actual performance, plus capability of performance . . . ," and "output measure" as "a useful descriptor of operational functions performed, measured

³⁰U.S., Department of Defense, Office of the Assistant Secretary of Defense (Comptroller), Memorandum for Secretaries of the Military Departments, Chairman of the Joint Chiefs of Staff, Subject: "Improved Ways of Measuring Outputs," Washington, D. C., May 12, 1967, Encl., p. 2.

³¹U.S., Department of Defense, Office of the Assistant Secretary of Defense (Comptroller), Management Systems Development, "Output Measurement Systems, Development Plan," Washington, D. C., October 4, 1967, p. 3-1.

³²Ibid., p. 4-2.

in relation to functions assigned, and of capabilities possessed, measured in relation to capabilities required."³³ Capabilities are to be measured in terms of readiness, which is defined as "the capability of an organization, weapon system or equipment to perform the missions or functions for which it is organized or designed."³⁴

Because output measurement in the DOD is still in the early, theoretical stages of development and the principles and definitions quoted above are only tentative, objectivity demands that appraisal in depth await promulgation by OSD of firm guidelines and directives. The assumptions and rationale which support OSD planning, however, deserve study. Two points in particular must be examined. First, can the output of military units be measured by a quantified index as envisioned by ASD (C)? Second, is there a stable, determinable relationship between the inputs and the outputs of military units?

Concerning measurements for control purposes, Peter Drucker states that measurement " . . . must present the events measured in structurally true form."³⁵ Neither performance nor readiness, alone, adequately describes all of what a military unit does or is ready to do. Roland N. McKean, co-author with former Defense Comptroller Hitch of

³³Ibid., App. A, p. A-1.

³⁴Ibid., p. A-2.

³⁵Drucker, p. 289.

the acclaimed The Economics of Defense in the Nuclear Age³⁶ explains the problems of output, effectiveness, measurement as follows:

The basic difficulty is that of generating unique, simple, helpful measures of effectiveness. First, for numerous weapon systems and program elements, there are no satisfactory metrics of effectiveness.

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Many program elements yield multiple and incommensurable achievements. . . . The achievements cannot be made commensurable by putting them in terms of a common denominator. To show an indicator of one achievement and omit the others could be highly misleading. To show indicators of all such achievements could generate a clumsy budgetary exhibit that would be very costly in use.³⁷

The problems exposed by McKean are formidable and would appear to make output measurement an impossible task. Indeed, some authorities state that the task is impossible. OSD should not be deterred from seeking to develop more meaningful output measures, but must never lose sight of the understanding that such measures will probably never truly describe all that should be known about the effectiveness of military units. The seasoned judgment of military commanders will always be required to complement quantified output indices in the decision-making process.

The relationships between resources consumed or available for use and performance or readiness are complex

³⁶Charles J. Hitch and Roland N. McKean, The Economics of Defense in the Nuclear Age (Cambridge, Massachusetts: Harvard University Press, 1960).

³⁷Roland N. McKean, "Remaining Difficulties in Program Budgeting," Defense Management, ed. Stephen Enke (Englewood Cliffs, New Jersey: Prentice-Hall, Inc., 1967), p. 68.

and dynamic through the time dimension and defy abstraction into simple models. Independent variables which would affect the output function in such a model would include such factors as the age and condition of equipment (aircraft, ship, weapons, etc.) available to each military unit, the state of training and the experience of personnel, training/operating schedules, geographical location, the imponderable matter of morale, and the like. A correlation between resources consumed or available for use and output no doubt exists in almost every case, but it is unique to every case. Consider the following example, which is applicable to attack aircraft carriers (CVA's) in the pre-Viet Nam environment:

CVA's are individually configured with electronic equipment, machinery, etc., and may bear no more than a physical similarity to other CVA's, even those of their own "class." CVA's go through a cycle beginning with intensive training following periodic overhaul, followed by operations and re-training and more operations, and ending with return to overhaul. Time between overhauls is several years. Costs during overhaul are at the highest of any time during the cycle, while performance and readiness are nil. Costs are relatively high and performance and readiness generally increasing during the training phase of the cycle. During operations, costs are generally confined to normal daily operating and maintenance costs and are consequently relatively low, and performance and training are at their peak.

At any point in time there are CVA's in each phase of the cycle. Comparison of inputs and outputs among CVA's must, therefore, cover a number of years and take into account the individual differences of each CVA involved. While this example is the extreme because of the comparative size of the CVA, it is true of every vessel in the Navy, and similar problems are true of any mobile operating unit, including aircraft squadrons.

Valid decision making under such circumstances requires a great volume of non-quantitative supporting information. Since one policy of RMS is that " . . . data at each management level will consist of summaries of data used at lower levels,"³⁸ the danger exists that in the summarization and filtration of information as it flows upward in the Defense establishment, the detailed information needed to properly explain all input/output relationships will be lost.

The principles set forth by ASD (C) to guide the development of output measures include the following: "The Secretary of Defense needs information on output in order to manage the allocation of resources, plan the future defense posture and resource requirements, evaluate the current status of the establishment, and be made aware of the areas where corrective action is needed."³⁹ (Emphasis mine.) This emphasis on tailoring the output measures for the use of the Secretary

³⁸DOD Instruction 7000.1, p. 4.

³⁹Memorandum, "Improved Ways of Measuring Outputs," Encl., p. 2.

of Defense strongly implies that OSD should build single, quantified indices of output and simple input/output models since the Secretary does not have the time to spare to analyze great quantities of detailed data. While decision-making on a broad, program or weapons system basis using simple models and single output indices at the OSD level is probably feasible, detailed decision-making applicable to individual, lower-level organizational units clearly is not. The broad guidelines promulgated by ASD (C), therefore, can only be considered as applicable to decisions and analyses at the OSD level.

Accrual Accounting

DOD Instruction 7220.22 directs that "the accrual basis of accounting will be used"⁴⁰ in all accounting systems for operations. OSD's goal is not only to gain better financial information concerning past operating expenses, but also to afford managers better control of expenses (versus obligations) while operations are underway. While this change is conceptually large, in practice it has been relatively easy to implement in the Navy. The Navy utilized stock funds and industrial funds extensively before PRIME and has increased use of those devices as a result of PRIME. The majority of naval operating units subsist on a day-to-day basis from either or both of those funds. Since obligation and expense are recorded simultaneously under that circumstance, reported operating costs more appropriately describe true period costs

⁴⁰DOD Instruction 7220.22.

of operations. The Navy has developed full accrual accounting procedures which are ready to be employed when, or if, the Congress grants permission to OSD to implement PRIME. Accrual accounting, however, is bound closely with the administrative control of operating funds, which has created some problems that will be discussed in the following paragraphs.

Administrative Control of Operating Funds

The Anti-Deficiency Statute, R.S. 3679, directs in part that "no officer or employee of the United States shall make or authorize an expenditure from or create or authorize an obligation under any appropriation or fund in excess of the amount available therein,"⁴¹ and provides severe penalties for violators. R.S. 3679 allows administrative division and subdivision of appropriations by agencies as long as accountability for compliance with the basic provision of the law is maintained and responsibility for non-compliance can be fixed on an individual. The military departments currently subdivide the Operations and Maintenance appropriations by means of "allotments," which carry R.S. 3679 sanctions, to the lowest organizational entities which have major accounting capabilities. To insure compliance with R.S. 3679, military accounting systems account primarily for obligations within the appropriation structure enacted by the Congress. Since military personnel are controlled centrally, Military Personnel

⁴¹U.S., Department of the Navy, Financial Management in the Navy, NAVPERS 10792-B(INT), 1966, App. A, quoting 31 U.S.C. 665, Revised Statute 3679, par. (a).

appropriations are accounted for centrally and no division subject to R.S. 3679 is made.

PRIME's attempts to redefine the administrative control of funds has followed a tortuous path and is not yet resolved. The original intention of PRIME to change the process involved the following:

1. Shift to accrual accounting for expenses within program structure, instead of obligation accounting within appropriation and budget activity structure.
2. Merger of the Operations and Maintenance and Military Personnel appropriations.
3. Issuance of single operating budgets to organizational units which would cover both operating and military personnel costs and which would carry R.S. 3679 sanctions for the operating budget total.

Under PRIME's concept, the user of resources would be accountable, but would also have some flexibility in the allocation of resources between military personnel and other costs. PRIME's concept was entirely dependent upon agreement of the Congress to revise the budget and appropriation structures to conform to the program elements and to merge the two operating appropriations. And this the Congress did not do. OSD, nevertheless, had an alternate plan which ASD (C) promulgated on October 5, 1967.⁴² The principal feature of the plan was

⁴²U.S., Department of Defense, Office of the Assistant Secretary of Defense (Comptroller), Memorandum, Subject: "Administrative Control of Operating Budgets," Washington, D. C., October 5, 1967.

that military departments would be prohibited from making administrative divisions of appropriations subject to R.S. 3679. Instead, R.S. 3679 sanctions would stop at the military department level. Organizational units would be issued a single operating budget covering operating and military personnel costs "subject to Secretary of Defense administrative control."⁴³

This plan could be viewed as abrogating, or weakening at best, the prerogatives of the Congress to regulate the administration of appropriated funds, as expressed in R.S. 3679. The intent of the law is to definitely fix responsibility on specific individuals for overobligation or overexpenditure of funds appropriated by the Congress. R.S. 3679 responsibilities would stop at the Secretary of the military department level under PRIME's alternate plan and it is unreasonable to expect that the Secretaries could be held personally accountable for the actions of the tens of thousands of military and civilian personnel involved in the administration of appropriated funds all over the surface of the earth. This plan, therefore, did not remain in effect for long. After discussions in early November among representatives of all agencies involved, ASD (C) promulgated yet another plan.

The latest plan provides that a single operating budget, which will include the costs of military personnel,

⁴³Ibid.

will be issued by OSD to the military departments.⁴⁴ That portion of the operating budget applicable to Operations and Maintenance appropriations will be subject to R.S. 3679. Separate obligational authority for Military Personnel appropriations costs will be issued, subject to R.S. 3679, as presently done. R.S. 3679 responsibilities for Military Personnel funds will continue to reside at the military department level. Military departments may subsequently issue single operating budgets, again including both operating and military personnel costs, to subordinate organizational units with R.S. 3679 sanctions attached to the portion of the operating budget applicable to Operations and Maintenance funds. But, at the operating level, "the amount subject to R.S. 3679 [that portion applicable to Operations and Maintenance funds] will be automatically and concurrently reduced in the amount, if any, by which expenses for military personnel are incurred in excess of the amount specified for military personnel within the total operating budget."⁴⁵ (Emphasis mine.)

While the latest plan may be acceptable to the Congress in terms of R.S. 3679, the relationship it establishes between Operations and Maintenance and Military Personnel appropriations at the operating level, the automatic and concurrent reduction of operating funds if military personnel costs

⁴⁴U.S., Department of Defense, Office of the Assistant Secretary of Defense (Comptroller), Memorandum, Subject: "Administrative Control of Operating Budgets," Washington, D. C., November 22, 1967.

⁴⁵Ibid., Encl., p. 3.

exceed the budgeted amount, introduces a completely new and astounding concept to the administrative control of operating funds. As pointed out previously, military personnel allocations and promotions are controlled centrally. The unit commander cannot in any sense of the word exercise even nominal control over his military personnel costs. But the latest plan completely ignores this fact and quite literally leaves the operating commander "holding the bag" by making him subject to prosecution for violations of R.S. 3679 which he is completely powerless to prevent. Even the very best financial manager can become a violator because of unexpected personnel receipts or promotions. The only recourse for all operating commanders, therefore, is to hold back reserves of operating funds to cover such an event. Since operating funds are annual funds, any such reserves remaining at the end of each fiscal year lapse for use, by law, and are lost forever to the operating unit and the DOD. In any case, the concept of "reserves" at the operating level is noxious since one of the precepts of OSD resource allocation is that firm requirements, only, are funded. A reserve at the operating level, therefore, would imply that something in the plans would have to go unfunded until very late in the fiscal year, at best. The problem is compounded because if military personnel costs are below the budget, no automatic and concurrent increase to operating funds is allowed. The total amount of the thousands of reserve funds throughout the DOD would be staggering to the imagination.

During deliberations preceding promulgation of the latest plan, the Deputy Comptroller of the Navy offered to ASD (C) the following comments:

Perhaps of greater importance than the unprofitable creation of reserves is the psychological impact of this reducibility procedure upon the local commander who has been looking forward to RMS as a valuable management tool. I anticipate that this procedure, if implemented, will have a tendency to undermine the substantial time and effort invested by the Navy Department in educating and convincing managers of the merits of RMS. In effect, it applies greater constraints on the manager in 3679 terms than exist today and the reaction cannot be expected to be anything other than adverse. The adverse reaction is heightened by the realization that in a converse situation (when military personnel numbers are reduced) the O&M [Operations and Maintenance] availability is not automatically increased.

.....

The Navy is unequivocally opposed to the concept that military personnel obligations be related to obligations under the O&M,N appropriations for determination of violations of Section 3679.⁴⁶

Despite the serious shortcomings of the latest plan and the strong opposition of the Navy pointed out by the above comments, the plan was promulgated on November 22, 1967, for additional comments from the military departments. ASD (C) did state that "we are considering various methods, . . . to minimize the impact on operation and maintenance availability within operating budgets of unanticipated movements of military personnel."⁴⁷ But such methods, at best, will provide

⁴⁶Memorandum from the Deputy Comptroller of the Navy to the Assistant Secretary of Defense (Comptroller), Memorandum NCFs, Washington, D. C., November 17, 1967.

⁴⁷ASD (C) Memorandum, "Administrative Control of Operating Budgets," November 22, 1967.

only a cure for the symptoms of the problem, not the problem itself.

The November 22, 1967, plan bears little conceptual resemblance to the original plan. The fundamental prerequisites to the original plan were refused by the Congress so any plan must necessarily be based on other concepts. One cannot help but arrive at the feeling that OSD is not concerned with concepts but is determined to change something --anything--for the sake of change. The latest plan smacks of being merely a device contrived to permit a change, regardless of the merit of the change. The problem, repeatedly pointed out by this study, is that the present military personnel distribution system is not compatible with the plans of OSD. Monetary constraints imposed by OSD can only create hardships on operating commanders. The same problem existed in the original OSD plan. It must be concluded, therefore, that the OSD planning for change to the administrative control of operating funds is unrealistic and in basic error by not recognizing the existing nonmonetary personnel management system.

Summary, Conceptual Changes

The conceptual changes of PRIME are the keys to the management control system which PRIME seeks to establish in the DOD. Taken singly, or as a group, the conceptual changes are generally reasonable and sound. Under appropriate circumstances, each concept will no doubt contribute to improved

management control. It must be noted, however, that the concepts discussed in this chapter are all highly interdependent, each bearing on the outcome of the others to some degree.

Two concepts, full costing and the revised administrative control of operating funds, are applied without adequate recognition of the difficulties which they will encounter in practice. The debatable concept of revision of the budget and appropriation structures to conform to program structure has been skirted. The vital concept of output measurement has lagged in practical development and the planning that is taking place is almost exclusively oriented toward the needs of the Secretary of Defense. While that is at least a beginning toward guidance to the operating managers who must actually make PRIME work, this writer believes that more positive action should have been taken at the beginning of the planning for PRIME, not at the end. In summary, this writer must conclude that PRIME has been planned on a purely conceptual level and has not given adequate weight to the practical matters which will bear on the ultimate success or failure of PRIME.

CHAPTER VI

CONCLUSION

The basic question raised by this study is "Can PRIME achieve the improvements to military resource management which are claimed by its planners?" The answer to that question is neither easy to determine nor can it be a simple yes or no. As pointed out in this study, PRIME is a melange of loosely integrated systems and procedures drawn from Federal law, commercial practices, and theory and is promulgated in a variety of forms and styles of directives. As such, it is even difficult to exactly define just what PRIME is. Many of the provisions of PRIME are common-sense, realistic changes and improvements that will do much to satisfy the law and to establish a more effective resource management environment. Much more of PRIME, unfortunately, is not practically workable at the present time and the net effect of PRIME will not be as promised by PRIME's planners. If pressed for a single answer, the writer believes that this study shows that PRIME will not represent an overall improvement to military resource management.

PRIME will indeed generate more reliable and meaningful financial information for programming and budgeting, by

institution of the cost building block and responsibility center concepts, realignment of the program elements to conform to organizational units, and other procedural changes. By themselves, the procedural changes of PRIME are quite effective and easy to implement. They must receive proper credit and praise as worthwhile improvements. But in going beyond these immediately-attainable changes and seeking to establish a wholly new management philosophy, PRIME has created many problems and aroused the strong opposition of the Congress. PRIME would place a heavy burden on operating managers and bind them with more constraints than now exist. Therefore it is difficult to accept the premise of PRIME that it seeks to enhance the manager's ability to make decisions and to motivate him to make the "best" decisions.

The basic problem which PRIME ignores is that Defense commanders are not equipped to exercise a great deal of discretion in resource allocation at the operating level. The majority of Defense commanders are not trained or experienced as managers of resources in a financial sense and are still, despite PRIME, bound by a great many nonmonetary constraints on resources, in particular military personnel. PRIME does not match costs with the managers making the decisions concerning the quality, quantity, or conditions of use of a great many military resources but instead focuses on the mere user of those resources. The military personnel allocation problem is one of the largest problems, along with the Congress, which confronts PRIME. PRIME has seen fit to disregard

or discount this problem and the entire management control system of PRIME is thereby rendered futile.


PRIME has promised to measure true costs, not "allocated or prorated" costs. But the standard rates to be charged for military personnel services and maintenance of investment items are, in fact, only approximations of the true cost. PRIME has, therefore, compromised accuracy for expediency. The reliability and credibility of financial data applied to any given organizational unit is thereby lessened. In addition, ~~for the reasons pointed out in Chapter V,~~ PRIME can produce serious distortion to the true costs of maintenance for comparative purposes among aviation units. ?

PRIME has aroused considerable interest in the improvement of financial management in the military department. Operating managers are more aware than ever before of the benefits to be gained from the coupling of resources and operating management. Unfortunately, the overwhelming emphasis of PRIME to date has been on the costing of inputs. Output measurement, a critical factor to the manager, has been relegated to last place in the order of development of PRIME. To date, no concrete working guidelines to aid the military departments in developing meaningful output measurements have been promulgated by OSD. What planning there is in OSD appears to be tailored to the needs of the Secretary of Defense, only. There has been no compelling sense of urgency regarding the importance of output measurement communicated

to the military departments, whereas the measurement of inputs has been the subject of intense, protracted deliberations at all levels of the DOD. It is feared by the writer that PRIME will therefore engender a military management philosophy focused almost exclusively on the means to the end and the efficiency of the means. The ultimate test of Defense management in today's troubled world will be effectiveness and effectiveness should be given at least parity with efficiency. PRIME has yet to give effectiveness the attention that it deserves.

PRIME encompasses many changes which would be applied indiscriminately throughout the DOD without regard for existing systems--systems which could provide virtually the same financial information for planning, programming, and budgeting which PRIME seeks, at no extra cost. PRIME is not content to use or improve existing systems, however, but must instead create totally new systems within systems. The Congress specifically prohibited implementation of PRIME in fiscal year 1968 and can be expected to continue to prohibit any change which might disrupt the way the Congress now enacts Defense appropriations. It would seem that OSD should take the interests of the Congress into account and reexamine PRIME in depth. The Congress called PRIME "too much too soon," and the label seems to fit. A more selective application of the concepts of PRIME, taking into account existing Defense management systems and the wishes of the Congress, would yield far less costly and disruptive changes.

To be effective, any management control system must be sponsored completely and sincerely by all levels of management. PRIME has already disturbed the Congress and no support is likely from that quarter. The enthusiasm for RMS/PRIME was initially high in the military departments. But, possessing the faults discussed in this study, PRIME cannot expect to gain full acceptance, especially at the operating level. And the operating managers are the very people that PRIME purports to aid. The writer believes that PRIME has been grossly oversold and will never achieve the lofty ideals expressed by its planners. Until PRIME backs down from its initial, zealous approach and adopts more realistic plans based on utilization of as much of existing systems and procedures as is possible and minimization of the disruptions created by change, it faces a bleak future.



BIBLIOGRAPHY

Books

- Anthony, Robert N. Management Accounting, Text and Cases. Homewood, Illinois: Richard D. Irwin, Inc., 1964.
- Anthony, Robert N. Management Control Systems, Cases and Readings. Homewood, Illinois: Richard D. Irwin, Inc., 1965.
- Burkhead, Jesse. Government Budgeting. New York: John Wiley & Sons, Inc., 1956.
- Drucker, Peter F. "Controls, Control and Management," Management Controls: New Directions in Basic Research. Edited by Charles P. Bonini and Others. New York: McGraw-Hill Book Company, 1964.
- Grosse, Robert N. and Proschan, Arnold. "The Annual Cycle: Planning-Programming-Budgeting," Defense Management. Edited by Stephen Enke. Englewood Cliffs, New Jersey: Prentice-Hall, Inc., 1967.
- Gordon, Myron J. "The Use of Administered Price Systems to Control Large Organizations," Management Controls: New Directions in Basic Research. Edited by Charles P. Bonini and Others. New York: McGraw-Hill Book Company, 1964.
- Hitch, Charles J. Decision Making for Defense. Berkeley and Los Angeles, California: University of California Press, 1965.
- Hitch, Charles J. and McKean, Roland N. The Economics of Defense in the Nuclear Age. Cambridge, Massachusetts: Harvard University Press, 1960.
- McKean, Roland N. "Remaining Difficulties in Program Budgeting," Defense Management. Edited by Stephen Enke. Englewood Cliffs, New Jersey: Prentice-Hall, Inc., 1967.
- Niskanen, William A. "The Defense Resource Allocation Process," Defense Management. Edited by Stephen Enke. Englewood Cliffs, New Jersey: Prentice-Hall, Inc., 1967.

Novick, David. "The Department of Defense," Program Budgeting, Program Analysis and the Federal Budget. Edited by David Novick. Cambridge, Massachusetts: Harvard University Press, 1965.

Smithies, Arthur. "Conceptual Framework," Program Budgeting, Program Analysis and the Federal Budget. Edited by David Novick. Cambridge, Massachusetts: Harvard University Press, 1965.

The Hoover Commission Report. New York: McGraw-Hill Book Company, Inc., 1949.

Articles

Ray, Thomas W. "The Bureaus Go On Forever . . .," United States Naval Institute Proceedings, XCIV, No. 1, (January, 1968).

Government Documents

U.S. Bureau of the Budget. Planning-Programming-Budgeting. Bulletin 68-2, 1967.

U.S. Comptroller General of the United States. Accounting Principles and Standards for Federal Agencies. Washington, D. C.: Government Printing Office, 1967.

U.S. Congressional Record. Vol. CXIII.

U.S. Department of Defense. Instruction 7000.1, "Resource Management Systems of the Department of Defense," August 22, 1966.

U.S. Department of Defense. Instruction 7040.5, "Definitions of Expenses and Investment Costs," September 1, 1966.

U.S. Department of Defense. Instruction 7220.15, "Budgeting and Accounting for the Cost of Military Personnel Services," June 1, 1966.

U.S. Department of Defense. Instruction 7220.19, "Changes for Maintenance of Investment-Type Equipment," December 20, 1966.

U.S. Department of Defense. Instruction 7220.20, "Expense Data Requirements," December 20, 1966.

U.S. Department of Defense. Instruction 7220.22, "Accounting System for Operations," January 10, 1967.

Johnson, Lyndon B. Memorandum to the Heads of Departments and Agencies, Washington, D. C., May 24, 1966.

Johnson, William H., Commander, United States Navy, Office of the Comptroller of the Navy. An Address to the Students of the Navy Graduate Financial Management Program, The George Washington University, Washington, D. C., November 15, 1967.

McNamara, Robert S. Letter to Hon. George H. Mahon, Chairman, House Committee on Appropriations. Washington, D. C., August 7, 1967.

Sjogren, G. W. Memorandum NCFS 352 7300/1 to L. W. Carlson and others. Washington, D. C., November 21, 1967.

Tartasky, Meyer. "Improvement to the Programming System, Department of Defense," Project PRIME Handbook. U.S. Department of Defense, Office of the Assistant Secretary of Defense (Comptroller). Washington, D. C., 1967.

Weitzel, Frank H. Address to Students of the Navy Graduate Financial Management Program, The George Washington University, Washington, D. C., November 13, 1967.

Presentation of Assistant Secretary of Defense (Comptroller), September, 1966.